

CHARTING MAINE'S FUTURE

AN ACTION PLAN FOR PROMOTING SUSTAINABLE PROSPERITY AND QUALITY PLACES



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ACKNOWLEDGMENTS

Many, many people and organizations contributed to this project, so the Metropolitan Policy Program at Brookings has incurred many debts over the last 18 months. Enlarging our sense of obligation is the uncommon generosity and community-mindedness of Maine people.

We owe our first debt to GrowSmart Maine, which invited this report, raised the money to enable it, and has begun to mobilize an unprecedented array of Maine citizens and constituencies to support this report's recommendations.

In particular, we want to thank Alan Caron, GrowSmart's president and CEO, who in ways large and small has tirelessly advocated for the importance of this work. All along Alan has seen the potential for Maine people to rally around a bold and appealing agenda that responds to Mainers' desire for both prosperity and a superlative quality of place, and we hope we have provided that. It has been our good fortune as well as Alan's, moreover, to benefit from the labors of GrowSmart's energetic staff, including Lisa Fahay, Maggie Drummond, Alison Rehnberg, and Irma Bauer-Levesque.

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Note: The views expressed here do not necessarily reflect those of the trustees, officers, or staff members of the Brookings Institution; the project's funders; or the members of the project's steering committee.

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EXECUTIVE SUMMARY

For all its challenges Maine stands within reach of a new prosperity—if it takes bold action and focuses its limited resources on a few critical investments.

The moment is urgent. After decades of industrial restructuring and drift, the pace of transformation is quickening, and the slow replacement of the old order is yielding a new one that may bring better lives for Mainers.

New population growth is bringing new people and new wealth to the state.

The ongoing and still painful shift to a more diversified service-oriented economy means that the state has less to lose in the future and more to gain. And for that matter, population growth is in some cases restoring life to towns and regional centers that have been sagging for decades.

Moreover, the wheel may now be turning in Maine's direction. As the search for quality places grows in importance, Maine possesses a globally known "brand" built on images of livable communities, stunning scenery, and great recreational opportunities. Likewise, as "innovation" drives more of the economy, Maine's reputation for Yankee ingenuity and resourcefulness matters more. On several counts, in short, Maine is surprisingly well-positioned for the future.

And yet, for all that, Maine's future success is by no means assured.

Workers see quality jobs—their own and others'—being replaced with lower-paying ones yet often lack the skills or opportunity to trade back up. Policymakers tout the promise of Maine's traditional and high-tech industry clusters, but meanwhile the hoped-for future of plentiful, good-paying new jobs seems to come too slowly—especially in rural areas. And all the while unplanned, haphazard suburban development rushes along too fast, in many places taking something away—a cherished woodlot or open field, a favorite point of water access for fly-fishing, the way a certain small town felt.

Adding to these complaints are the state's high taxes, ongoing fiscal challenges, and continued partisan bickering over

such issues as the efficiency of state and local government and the direction of state economic policy.

In sum, a state with much promise seems stuck: surprisingly pessimistic about its future, aware that great change is

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upon it, but fearful that it isn't adapting as well as it needs to.

This report takes the measure of this moment. Sponsored by GrowSmart Maine and funded by a wide array of Maine foundations, businesses, conservation groups, and private citizens, **"Charting Maine's Future: An Action Plan for Promoting Sustainable Prosperity and Quality Places,"** assesses the current state of the state and suggests a route forward.

More specifically, the analysis offers the state a unifying view of its situation followed by a focused agenda for state-level policy reform aimed at promoting a new era of "sustainable prosperity" in Maine.

In that vein, the pages that follow draw a number of conclusions about the state:

1. Maine is changing in dramatic, sometimes surprising ways. In this respect, Maine's current demographic, economic, and development trends describe a state in the midst of significant transformation. These dynamics confirm that Maine is neither what it once was nor quite what it thinks it is:

- **Once stagnant, Maine's population is growing again.**

In the standard view (which has some truth to it), Maine is an aging state that almost always grows slower than the rest of the country and New England. And it's true that Maine's population virtually stopped growing in the 1990s while the number of 25- to 34-year-olds residing in Maine has continued to decline. However, a closer look reveals that Maine is now experiencing a significant increase in population growth. Since 2000, the state's annualized growth rate has nearly doubled, jumping 20 places from 46th in the 1990s to 26th since 2000—by far the biggest acceleration among the 50 states. Driving this growth, meanwhile, has been the nation's fifth-highest domestic in-migration rate since 2000. Every county in Maine witnessed net gains of transplants from outside the state between 2000 and 2004, and because of that Maine is now growing faster than all other New England states except New Hampshire. Every major region is now participating in the growth. Two positive results of this acceleration include the arrival of newcomers with relatively higher household incomes, and the attraction of more young adults to the state. A more troubling related development has been rapid home-price appreciation, especially along the coast and in Southern Maine

- **Once based on goods production and natural resources industries, Maine's is becoming a diverse, innovation-oriented services economy.** On the economy, the conventional wisdom assumes Maine is in crisis because its fortunes revolve around manufacturing and natural resource-based industries that are now collapsing. And it's true enough that manufacturing and natural resources industries continue to shed significant numbers of jobs. However, a closer look confirms that Maine outperformed the nation on job creation during the last economic cycle, and now enjoys a per capita income at a 50-year high compared to the U.S. average. Shaping all of this, meanwhile, is a dramatic and ongoing restructuring of the economy that has seen Maine's goods-production "super sector" shrink to essentially the same size of

the nation's as a share of employment even as its consumer and business-services sectors have grown. Also shaping Maine's fortunes is the increased organization of key industry "clusters"—groups of interrelated or similar firms in "traded" (or export) sectors such as boat-building, forest industries, information technology, biotechnology, tourism, or agriculture whose success or failure at innovation will determine the state's ability to produce greater numbers of higher-quality jobs over the long haul. These shifts have together allowed the state to add jobs even as traditional industries contracted. But they have so far resulted in modest pay increases (especially in rural Maine). The reason: Many high-paying manufacturing and forest jobs have been replaced by lower-paying consumer services positions given that massive job growth has yet to emerge in good-paying "export" clusters or the professional services sector

- **Once mostly rural, Maine is suburbanizing.** Finally, the conventional view of Maine's development status also needs revising. In the conventional wisdom, Maine remains overwhelmingly rural—a "place apart" from the vast waves of development sweeping much of the Atlantic Coast. However, the standard view does not account for the fact that more than 65 percent of the state—more than 860,000 Mainers—now lives in the 164 towns that comprise Maine's more-populated metropolitan and "micropolitan" areas. Within and beyond this populous metropolitan zone, moreover, dispersed, low-density suburban-style development has become the state's dominant settlement pattern. Overall, just 23 percent of Maine's post-2000 population growth has occurred in regional hub towns. By contrast, 77 percent of recent growth has taken place in surrounding towns, newer emerging towns, and rural areas distant from traditional centers. As a result, the state is converting extraordinary quantities of rural fields and woodlots to residential uses. From 1980 to 2000, for example, Mainers altered the character of 869,000 acres, or more than 1,300 square miles, of rural land—a territory roughly the size of Rhode Island. In the 1990s only Virginia lost a greater share of its rural land than Maine as every region consumed rural territory

2. These changes have brought some benefits to the state—but on balance they pose serious challenges.

These challenges represent urgent problems as the state strives to usher in sustainable growth:

- **Demographic change is raising education levels and may be replenishing the workforce . . . However, many workers remain unprepared for tomorrow's jobs.**

In this regard, recent gains in in-migration and higher-education attainment do not change the fact that Maine's aging population includes too few young workers and too few highly skilled or educated people. In the near term, these factors are producing both labor shortages in some areas and low pay for many as more of the best jobs require higher skill levels. Going forward, continuing shortcomings in the size and skill levels of Maine's workforce could complicate efforts to upgrade the state's economy and improve the livelihoods it provides to Maine workers

- **Economic restructuring is producing quality jobs in emerging innovation clusters . . . However, these clusters remain very small.**

On this front, too, the continued progress of Maine's traditional and emerging export sectors and clusters cannot obscure the fact that these industries lack critical mass and are not yet generating large volumes of jobs. To be sure, Maine's more traditional export industries—tourism, healthcare, non-store retailing, and finance and insurance—all slightly outperformed their national counterparts between 2000 and 2004 in terms of job creation. Moreover, this growth and growth in other innovation clusters like boat-building, advanced materials, and biotechnology is producing jobs that pay more than the state average. And yet, despite these gains, many of Maine's most important industry sectors and clusters remain modest in size, populated by few companies, and sometimes very loosely organized. This "thinness" across Maine's most promising sources of good-paying future growth limits the state's prospects for economic progress

- **Recent development patterns are beginning to give some cities and towns new life . . . However, suburbanization is increasing government costs and degrading the state's small towns and environment—its true "brand."** The good news here is that the state's overall quickening growth has brought new population to many of the state's traditional regional hubs—many of which were losing population in the 1990s. But for all that, widespread suburbanization and sprawl are driving up costs and may well be damaging the state's top calling card—its scenic beauty, the feel of its towns, its quality of place. On the cost side, the state's sprawling development patterns necessitated the construction of

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more than one dozen new schools statewide in the last decade at a cost of \$200 million—more than one-quarter of the state's total school-capital outlay. Additional costs are being imposed on once-rural towns as new growth requires them to provide more expensive suburban-type services and on households forced to drive farther out to find an affordable home. But what matters even more than these costs is the fact that Maine's development patterns are undermining the state's alluring brand, so important to its current and future economy. Crucial to this brand is the integrity of Maine's distinctive towns and villages and the stunning natural areas that lie between them. Unfortunately, far-flung, often-haphazard residential development is more and more blurring those crisp scenes as it impinges on forests, fields, and waterfronts all around the state

Maine is changing in dramatic, unexpected ways, generating both opportunities and anxiety

20	Number of places Maine moved up in its population growth rank since 2000. Maine's jump from 46th to 26th was the biggest turnaround in the nation
5th	Maine's rank on the rate of per-capita net domestic in-migration since 2000. Only Nevada, Arizona, Florida, and Idaho outpaced Maine's growth on this measure
32,000	Net number of migrants who moved to Maine from out-of-state between 1999 and 2004. More than half of the new residents came from Massachusetts and New Hampshire
12 percent	Share of Maine employment in goods production. That share is almost exactly the same as the national share
21 percent	Total share of Maine's employment in consumer services. That share exceeds the U.S. average by 6 percent
\$13,000	Difference in average annual wages between higher-paying business services jobs and the average Maine wage
91 percent	Maine's 2004 per-capita income as a percentage of the U.S. average. This matches the state's 50-year high
\$300,000	Median home sale price exceeded by 17 towns in Maine in 2005. Only one town reached this mark in 2000
77 percent	Percent of population growth between 2000 and 2005 that occurred outside of Maine's regional hubs
869,000	Number of acres converted from rural to suburban use between 1980 and 2000
2nd	Maine's rank among states on the loss in share of rural land in the 1990s. Only Virginia converted a larger share of its rural land
\$200 million	Cost of 13 new schools built between 1995 and 2005 in response to population dispersal
7th	Maine's rank on K–12 expenditure as a share of total personal income
11.1	Number of teachers for every school or district administrator in Maine. The state's administrator-to-teacher ratio is ninth-highest in the country
48 percent	Average property tax rate differential between higher-tax regional hubs and fast-growing emerging communities in 2003

Source: Brookings analysis of data from: U.S. Census Bureau; Internal Revenue Service; Bureau of Labor Statistics; Bureau of Economic Analysis; Maine State Housing Authority; National Center for Education Statistics; David Theobald, Colorado State University; Philip Trostel, Margaret Chase Smith Policy Center, University of Maine; Matthew Murray, University of Tennessee at Knoxville

3. Exacerbating these problems are at least three serious state-level policy challenges. In each case, shortcomings of state policy—accumulated over many years—must be counted either indifferent or negative influences on the state's chances of shaping a new era of “sustainable prosperity.”

- **An inconsistent economic-development stance over many years has weakened the state's efforts to improve its economy.** Maine has had no shortage of thoughtful leaders and bold ideas on economic development over the years. However, the state has frequently failed to stick to and sustain its ideas, with the predictable result that it has undercut the effectiveness of numerous intelligent but under- or un-funded initiatives that might have otherwise made a larger difference. In this respect, numerous state or quasi-public institutions intended to promote economic development remain small or under-funded, while other promising innovation- and development-finance programs and funds have been under-capitalized. This short-funding has limited the

impact of otherwise valid efforts to grow the state's small economy and enlarge “thin” export and innovation clusters

- **Maine's often-high costs of government and the unbalanced revenue system that supports them hinder the state's ability to promote sustainable prosperity.** On the spending side, Maine's unusually high expenditures on a number of state-level administrative functions as well as on K–12 education are likely squeezing out necessary spending in other areas even as they contribute to high taxes. (For its part, local government appears rather frugal by comparison to national and rural-state norms, though this may be because peer states rely more heavily on county governments that have wider responsibilities. In any case, it is noteworthy that municipal spending on services like police and fire goes up sharply in rapidly suburbanizing areas like Southern Maine—an indication that as sprawl forces growing towns to convert from mostly volunteer to mostly paid staffs the costs of redundant small governments goes up.) On the revenue side, meanwhile, Maine's high state-local

tax burdens and how they fall on various taxpayers may well be contributing to negative economic and land-use outcomes. High overall burdens, the second-highest property taxes in the nation, and the state's low thresholds for its very high personal income tax top rate all may well be sending negative signals to workers, entrepreneurs, and retirees about the state as a place in which to live and do business. Likewise, the wide 48-percent differential between the average property tax rates in regional-hub communities and those in outlying emerging communities serves a significant added spur to sprawl

- **Barriers to development in traditional regional hubs combined with weak local and regional growth management are eroding the state's unique character and contributing to sprawl.** On the one hand, Maine's convoluted state and local construction rules combined with the absence of significant catalyzing investment serve to discourage development in older places and discourage the reuse of historic structures. Along these lines, Maine's crazy-quilt of differing local and state building-code regimes, the orientation of most codes toward new construction, and the variable quality of code interpretation virtually guarantee that most development veers away from the state's traditional centers. It does not help that key state programs aimed at spurring redevelopment are grossly under-funded. On the other hand, Maine's ineffective state and local planning system leaves most Maine localities unable to manage growth and vulnerable to region-scaled sprawl. In this respect, the combination of Maine's intensely localistic planning system and the absence of sufficient support and incentives for municipal and regional planning efforts has left most Maine towns and regions susceptible to sprawl that further weakens town centers and degrades rural landscapes

4. Given these challenges, finally, Maine must seize this moment to make urgent investments in its future that will enhance its distinctive strengths. To guide these investments, “**Charting Maine's Future**” proposes—and suggests how to pay for—the following “Action Plan for Promoting Sustainable Prosperity in Maine.” Three major strategies, each encompassing a number of initiatives, are crucial:

Invest in a place-based, innovation-focused economy.

To foster economic growth, Maine should adopt a two-pronged investment strategy focused both on protecting and enhancing the state's quality of place and spurring business innovation by supporting the emergence of new ideas and vibrant industrial clusters.

To that end we recommend that Maine:

- Establish a \$190-million **Maine Quality Places Fund** to promote the revitalization of Maine's towns and cities; augment land and farm conservation; protect traditional uses of and access to Maine forests, farms, and lakes; and promote high-quality tourism and outdoor recreation given their importance to Maine's economic well-being. The fund could be financed as a revenue bond supported by a 3-percent hike in the state's lodging tax, which is primarily paid by Maine visitors
- Support a \$200-million **Maine Innovation Jobs Fund**, \$180 million of which should support job-creating R&D in promising scientific and technical disciplines, while another \$20 million goes to a new **Maine Cluster Development Fund** to foster the business-led partnerships that catalyze cluster-based job creation through collaborative work on key challenges like workforce development and marketing. Both of these funds would be financed by government efficiency savings located by the Maine Government Efficiency Commission (described below). Candidate areas for investment include:
 - forest products
 - agriculture, organic farming, and specialty foods
 - coldwater aquaculture
 - marine research
 - information technology
 - biotech
 - toxicology
 - advanced composite materials
 - outdoor recreation and tourism

Trim government to invest in Maine's economy and finance tax reduction. To redirect scarce resources toward the investments it needs to make, Maine should seek cost savings in state and local government that can be applied either to financing the Maine Innovation Jobs Fund and the Cluster Development Fund or tax reduction. Here, Maine should adopt a high-level business plan that demands hard-nosed cost-cutting as well as determined investment.

On the spending side we recommend that Maine:

- Establish a **Maine Government Efficiency Commission** to propose specific reforms to produce between \$60 and \$100 million a year in cost savings in state government through the elimination of structural redundancies and excess administrative overhead. The recommendations would be subject to an up-or-down vote by the Maine Legislature within a specified time period. Savings should be applied entirely to investments in future prosperity and tax reductions
- Fully fund and enlarge the **Fund for the Efficient Delivery of Education Services** to promote voluntary collaborations between schools and districts to reduce K–12 costs
- Reduce its **K–12 administrative expenditures** to the vicinity of the national average of \$195 per pupil, and so save about \$25 million a year
- Appoint a high-level **school district reorganization committee** to substantially reduce the number of school administrative units
- Develop the state’s first-ever state **school capital plan** to ensure that the state’s future investments in construction and renovation are made rationally
- Fully fund and enlarge the **Fund for the Efficient Delivery of Local and Regional Services** to promote voluntary collaborations to reduce service costs
- Support one or two major **pilots in regionalized service delivery** to explore and showcase far-reaching efforts at multi-municipal reorganization and cost reduction. The pilots can be funded by \$1 or \$2 million a year gleaned from the Government Efficiency Commission’s work

On the revenue side we recommend that the state:

- Apply to **property and income-tax reductions** any state-government spending savings located by the efficiency commission that exceed the \$27 million needed to support the innovation and cluster funds as well as the local government pilots. Tax reductions might include, in order of priority:
 - reimbursements to towns with large amounts of tax-exempt property
 - extensions of the homestead and circuit-breaker programs
 - increases in the state’s low threshold for its top income-tax rate
 - reductions in the top income-tax rate
- Explore ways to **“export” tax burdens** onto Maine visitors and non-resident second-home owners



Support the revitalization of Maine's towns and cities while channeling growth. Finally, Maine needs to tend to how its rules and policies shape communities. To accomplish this, the state should support its investments in place-making by making development easier in its traditional towns and cities and fostering improved local and regional planning.

Concerning redevelopment and revitalization, we recommend that Maine:

- Perfect and champion the state's **new model building and rehabilitation codes**; support their wide adoption with technical assistance, training, and outreach; and campaign over time for code uniformity
- Create and disseminate as a local option a new **model zoning ordinance** specifically designed to complement and enhance the special value of Maine's historic, densely built, traditional centers
- Better **fund and use existing revitalization and redevelopment-oriented programs and organizations.**

Three programs in need of bolstering are the Municipal Investment Trust Fund (MITF), the Maine Downtown Center (MDC), and the state's historic preservation tax credit. Most critically, MITF should garner \$90 million from the Maine Quality Places Fund to support matched grants to communities for catalytic investments in downtown-type infrastructure projects—riverfront parks, sidewalks, public reconstruction projects

Concerning local and regional planning we recommend that Maine:

- Provide substantial new **visioning and planning resources** to individual towns to help them reach consensus on how they wish to grow, and then implement their vision with ordinances. Funding for these and other planning activities could come from a new **Maine Community Enhancement Fund**, supported by a reasonable \$20 increase in deed recordation fees
- Foster much more **regional planning** by providing grants from the Community Enhancement Fund to groups of towns that agree to plan together. Even bolder collaboration could be encouraged by offering even stronger incentives for towns to actually implement regional growth-management plans. These incentives might include giving priority in the awarding of key state grants and aid flows to towns engaged in cross-boundary planning, or awarding authority for a local-option sales tax to towns that implement truly regional plans

Maine should make development easier in traditional towns and cities while doing much more to support and stimulate local and regional planning.

In the end, this report affirms Mainers' abiding intuition that economic success and quality places matter equally and can be fostered by effective, frugal government. Along those lines, "**Charting Maine's Future**" concludes that a more prosperous, more sustainable, and ultimately more equitable future can be Maine's if it sets gridlock aside and moves decisively to invest in its economy and quality places, while taking tough steps to trim government and streamline its land-use and development rules.

Move along these lines and Maine people will achieve a good measure of what they so earnestly desire. ■

AN ACTION PLAN FOR PROMOTING SUSTAINABLE PROSPERITY IN MAINE

ACTION

MAINE QUALITY PLACES FUND

This 10-year \$190 million revenue bond fund will support:

- Community revitalization
- Land and farm conservation
- Access to forests and lakes
- Tourism promotion

MAINE INNOVATION JOBS FUND

Some \$180 million of this \$200-million bond fund—financed by savings located by the Government Efficiency Commission—will support research and development in promising areas like:

- Forest bioproducts
- Biotechnology
- Information Technology
- Organic farming/specialty foods
- Advanced composite materials
- Precision manufacturing

A related Maine Cluster Development Fund of \$20 million will support industry-led partnerships that catalyze job growth through workforce development, network-building, and marketing

FUND FOR THE EFFICIENT DELIVERY OF LOCAL AND REGIONAL SERVICES

An annual stream of \$2 million—derived from savings located by the Government Efficiency Commission—will fully fund this existing program which promotes efficiency through inter-governmental cooperation on service delivery

TAX REDUCTIONS

Savings from the Maine Government Efficiency Commission in excess of \$27 million per year should go toward easing tax burdens through:

- Reducing property taxes
- Lowering the top income tax one-half point
- Increasing the income threshold for the top income tax bracket

MAINE COMMUNITY ENHANCEMENT FUND

Grants will support:

- Full implementation of building code reform
- The Maine Downtown Center
- Better visioning assistance and planning tools for towns
- Incentives for multi-municipal and region-scale planning

HOW TO PAY FOR IT

LODGING TAX

Three-point increase
(\$20 million per year)

MAINE GOVERNMENT EFFICIENCY COMMISSION

A bipartisan commission that will:

- Locate program savings of \$60 to \$100 million
- Propose reforms
- Send proposals to the legislature for an up or down vote

Savings will be invested in economic development activities and tax reduction

DEED TRANSACTION FEE

\$20 increase (\$5 to \$8 million per year)

I. INTRODUCTION



For all its challenges, Maine stands within reach of a new prosperity—if it takes bold action and focuses its limited resources on a few critical investments.

The moment is urgent. After decades of industrial restructuring and drift, the pace of transformation is quickening, the slow replacement of the old order is yielding a new one that may bring better lives for Mainers.

New population growth is bringing new people and new wealth to the state.

The ongoing and still painful shift to a more diversified service-oriented economy (which has likely gotten past its hardest stages) means that the state now has a more balanced small-business economy with less to lose in the future and more to gain. And for that matter population growth is in some cases restoring life to traditional towns and regional centers that have been down on their luck for decades.

Moreover, the economic wheel may now be turning in Maine's direction. As the search for quality places widens and grows in importance, Maine possesses a globally known "brand" built on images of livable communities, stunning scenery, and great recreational opportunities. Likewise, as "innovation" becomes a more important force in the economy, Maine's reputation for Yankee ingenuity, resourcefulness, and craftsmanship means even more. On several counts, in short, Maine is surprisingly well-positioned for the future.

And yet, for all that, Maine remains a work in progress—its mood anxious and at times sour, its future success by no means assured. Much seems promising, yes, but the average Mainer seems frustrated, even disturbed by the tenor and pace of change.

Workers see quality jobs—their own and others’—being replaced with lower-paying ones, yet many lack the skills or opportunity to trade back up. Policymakers tout the promise of Maine’s traditional and high-tech industry clusters but meanwhile the hoped-for future of plentiful, good-paying new jobs seems to come too slowly—especially in hard-bitten rural places. And all the while unplanned, haphazard suburban development rushes along too fast, in many places seeming to take something away—a cherished woodlot or open field, a favorite point of access for hunting or fly-fishing, the way a certain view toward the water always looked or a certain small town felt.

Adding to the complaints are the state’s unusually high taxes, ongoing fiscal challenges, and continued partisan bickering over such issues as the efficiency of state and local government and the direction of state economic policy.

In sum, a state with much promise seems stuck: surprisingly pessimistic about its future, aware that great change is upon it but fearful that it isn’t adapting as well as it needs to.

Which is where this report comes in: Sponsored by GrowSmart Maine and funded by a wide array of Maine foundations, businesses, conservation groups, and private citizens, **“Charting Maine’s Future: An Action Plan for Promoting Sustainable Prosperity and Quality Places”** assesses the current state of the state and suggests a route forward.

More specifically, this new analysis seeks to help Mainers move beyond gridlock by offering the state what we hope will be a unifying view of its situation followed by a focused agenda for state-level policy reform aimed at promoting a new era of “sustainable prosperity” in Maine.

What is “sustainable prosperity”? To be sure, the ideal of sustainable development lacks a precise definition, as notes public policy scholar Richard Barringer of the University of Southern Maine.¹ And yet, for years now there has been a growing global and national recognition that economic viability, ecological integrity, and community vitality frequently occur together and may ultimately depend on each other.²

In this respect, economic growth is more and more seen as essential to support environmental and community health, but so are the latter goods recognized as essential to securing the former. For example, just as globalization has increased regions’ focus on economic competitiveness, so is that concern increasingly intertwined with questions about environmental protection, energy efficiency, and climate change.



A state with much promise seems stuck: surprisingly pessimistic about its future, aware that great change is upon it, but fearful that it isn't adapting as well as it needs to.

This holistic insight, moreover, is one widely shared by Maine people, many of whom want badly to both improve their economy and protect their state's special environment—and see little contradiction in the two agendas. Nor is this view only a product of the state's longstanding tradition of conservation and environmental activism. Instead, it's bred in. Maine people don't live in the state accidentally, after all. Whether to the north or south, Maine people stick stubbornly by the state, despite its cold climate and various problems, because they love its mountains and seacoasts and traditional towns and feel at home with its hard-won economy of hard work and community.

And so this report responds to Mainers' intuition that economic success and quality places matter equally—are, in fact, linked inextricably.

Accordingly, the two chapters of the report that follow this one review the state's intertwined demographic, economic, and development trends, and identify their consequences. These sections document that the state is growing and changing, but that some of its most crucial new industries remain small even as haphazard, sprawling development patterns impose added costs on the economy and may be undercutting its precious "brand."

After that, the chapter entitled "Working toward Change" probes several ways that longstanding state-level policy shortcomings are influencing the way Maine is growing and are likely hindering the state's progress toward sustainable prosperity. This section contends that the state's scattered economic development efforts, often high spending and taxes, and outmoded building and planning rules are impeding the state's progress toward a sustainable prosperity.

Finally, the report's last major chapter offers "An Action Plan for Promoting Sustainable Prosperity in Maine." Informed by many Mainers' confidence that economic vitality, a more efficient government, and healthy communities and landscapes go together, this section lays out a practical agenda for making substantial near-term progress toward the goal of sustainable prosperity in Maine.



To that end, the report urges decisive action to:

- **Invest in building a place-based, innovation-focused economy in Maine**
- **Free up the resources to do that (as well as reduce taxes) by making government more efficient**
- **Foster the revitalization of Maine's towns and cities while channeling growth**

No, this slate of strategies does not cover every issue confronting the state, and neither does it propose a radical effort to "start over again" in Maine. However, it does encompass the initiatives we deem most critical to building sustainable prosperity. To that extent, the strategies offered here represent what we hope will be a broadly appealing, actionable, and fiscally defensible plan for making major progress toward sustainable prosperity.

Move boldly along these lines and Maine people might yet achieve a good measure of what they so earnestly desire.

Which brings up a final note: In the end, this is an optimistic report. To be sure, the pages that follow detail serious flaws with the status quo of state policy as it has accumulated in several

areas over many years. And yes, substantial policy changes are recommended.

But for all that these chapters reflect a strong conviction that Maine is a special place possessed of outstanding, truly enviable potential.

Throughout its research the project team has marveled at astounding natural endowments embodied in Maine's long coast, rolling meadows, and big woods. All along we have admired the authenticity of the state's human-scaled towns and villages and the town-meeting traditions that animate them. And above all, we have come to deeply respect the idealistic, dedicated, and free-thinking people of Maine, who we know will figure out the way forward.

For those reasons, this report seeks not to rebuild Maine in the image of some other place. Instead, these pages endeavor to help the state become more successful by becoming even more distinct and more itself.

ABOUT THE ANALYSIS

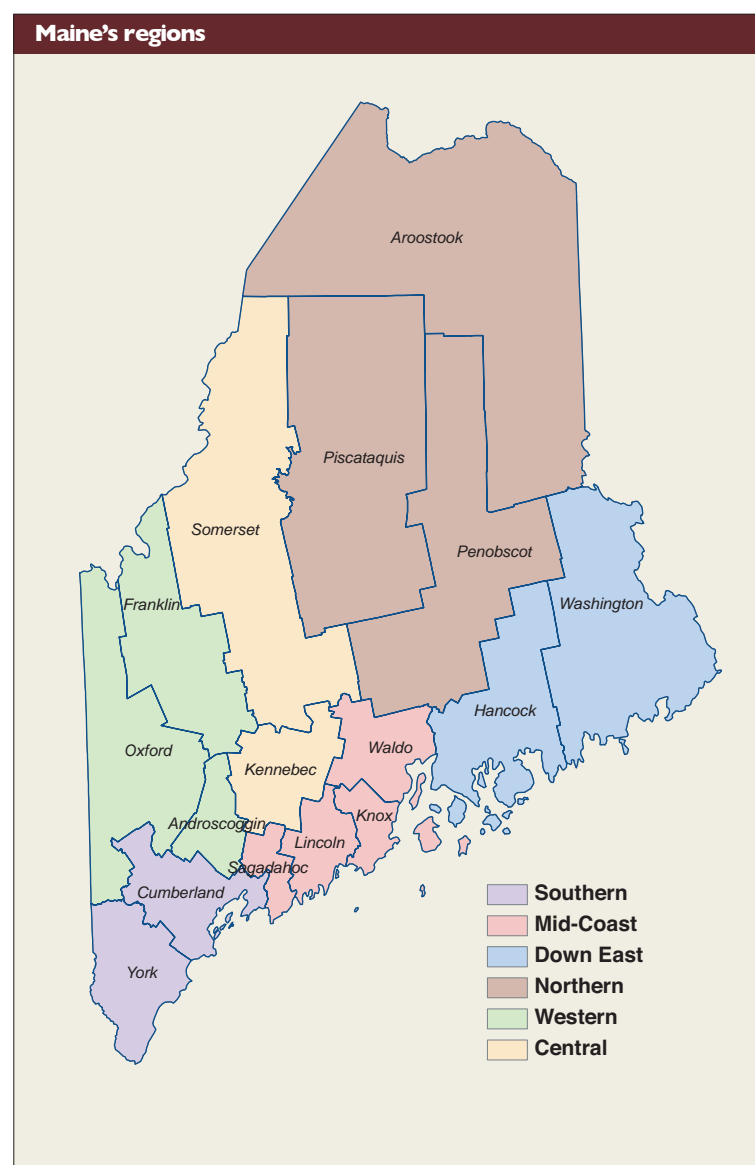
The expansive land area of Maine, encompassing 16 counties of widely varying size and nearly 500 small towns, requires a sharp geographical lens with which to analyze the state's trends.

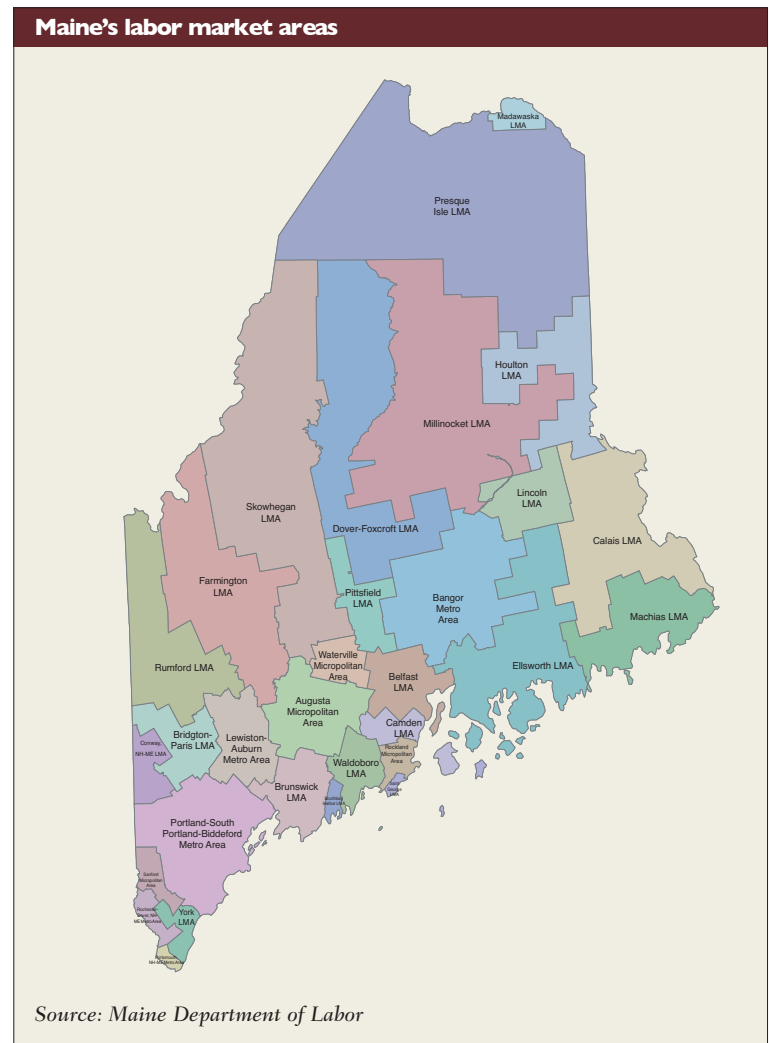
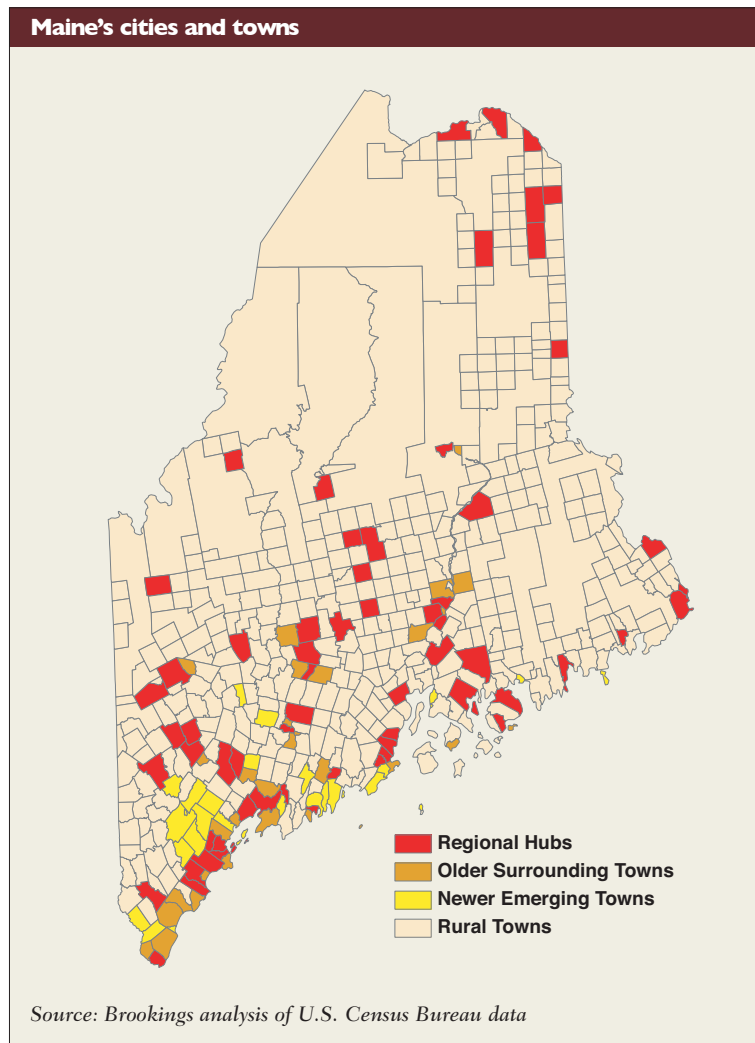
Several classifications of Maine's regions and municipalities are utilized in this report. Large county-based regions provide a regional context for the data while a typology of Maine's towns frames municipality-level trends. At times, "labor market areas"—areas of common social and economic interaction—provide a more regional focus.

Maine's six regions. The regions most often referred to in this report were assembled by aggregating the state's 16 counties based on similar demographic and economic trends and a general sense of shared experiences. Throughout the report, these regions provide a framework for reporting on regional similarities and differences within Maine.

Maine's cities and towns. This report assembles Maine's 488 municipalities into four types of towns: regional hubs, older surrounding communities, emerging communities, and rural towns.

- **Regional hubs:** Known as "service centers" in the policy community, regional hubs are also referred to in this report as "regional centers" or "core cities and towns." The regional hubs exactly match the 63 state-defined regional service centers, which are the traditional anchors of Maine's economy.³ This report pays careful attention to trends in these cities and towns because of their important role of providing a majority of the state's jobs, commercial activity, and social resources such as higher education and health care⁴
- **Older surrounding towns:** The older surrounding towns include the 14 towns designated by the state as being adjacent to—and essentially part of—one of the 63 regional hubs, as well as all towns that had housing densities of at least one housing unit per 10 acres by the year 1970. Many of the older surrounding communities share the same characteristics as the regional hubs, offering a significant number of jobs, commercial exchanges, and social services





- **Emerging towns:** Emerging towns are more recently developing places that are further removed from regional hubs and achieved average housing densities of one unit per 10 acres only after 1970. Most of these communities are located in Southern and Mid-Coast Maine
- **Rural towns:** Maine's rural municipalities, containing less than one housing unit per 10 acres, cover the vast majority of the state and contain many important natural assets. Because housing densities were calculated for the year 2000, rapid development may have actually suburbanized many of these towns, making them feel less rural and more suburban than the numbers indicate. Nevertheless, all are *historically* rural, which is important when examining trends over the past few decades

Maine's 31 labor market areas. Metropolitan and Micropolitan Areas, as defined by the U.S. Office of Management and Budget based on population and commuting trends, make up 10 major labor market areas (LMAs) in Maine. Examples include the Portland Metropolitan Area and the Augusta Micropolitan Area. In addition, the U.S. Department of Labor defines 21 smaller labor market areas based on economic integration of groups of towns, gleaned from Census commuting data. Generally, labor market areas are regions in which a person can change jobs without having to change homes. Or, more simply, LMAs can be thought of as "people-sheds."

ABOUT THE DATA

Several state and federal data sources were used to conduct analyses for this report.

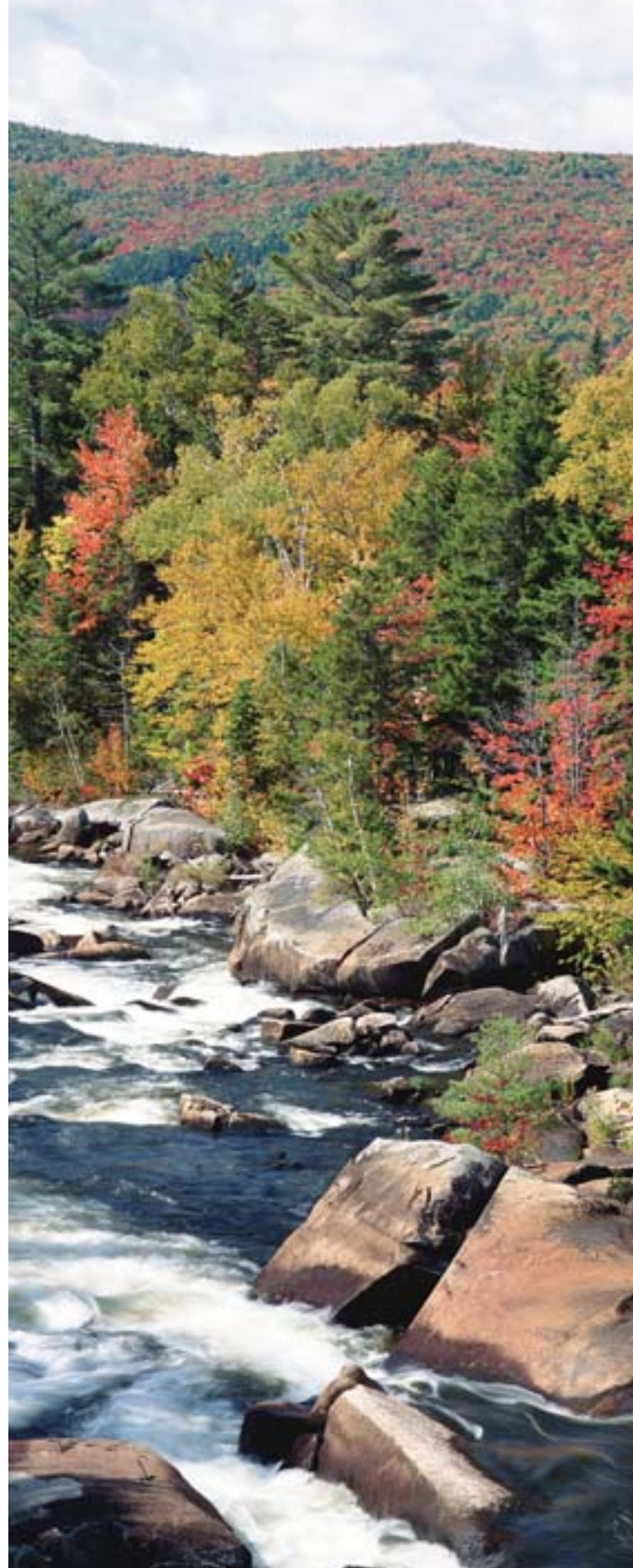
The decennial censuses from the U.S. Census Bureau provided the most comprehensive data for all geographies examined for the years 1970 through 2000. While now six years old, data from the most recent census are still the most complete and accurate set of demographic information available for smaller levels of geography. Unless otherwise noted, all decennial figures reported in the text derive from these data.

For the latest population figures, this report used the 2005 estimates from the U.S. Census Bureau's Population Division. These estimates—current to 2005—are calculated using a host of administrative documents and datasets. State and county populations are estimated using previous Census figures along with birth and death rates, recent data from federal tax returns, Medicare enrollment, and other records that allow for the approximation of migration flows. County population estimates are then distributed to cities and towns based on the sub-county areas' average household sizes from the 2000 Census and housing unit estimates derived from building permits and other housing data. The resulting numbers are by no means exact, but they provide the best up-to-date population figures available.

For recent information at the state level on indicators like education and aging, the Census Bureau's 2005 American Community Survey was utilized. Because the ACS is a sample and not a census, caution must be taken when interpreting reported values. Fortunately, margins of error for Maine estimates of indicators used in the report are quite small, though any significant causes for concern are noted.

Economic data came primarily from the federal Bureau of Labor Statistics and the Bureau of Economic Analysis. Maine Revenue Services and the Maine Municipal Association provided a wealth of tax related data. And data and reports from the Maine State Planning Office and the Maine Department of Labor are frequently cited.

Any other data sources used are clearly noted within the text and references. ■



II. EMERGING TRENDS IN MAINE:

THE STATE OF THE STATE

*Maine today is neither what it once was
nor quite what it thinks it is.*

Maine is beginning to grow again.

After decades of relative stagnation, the pace of transformation is quickening, the slow rearrangement of the old order is accelerating.

New population growth is bringing new people. Wrenching economic shifts continue to cancel traditional, good-paying jobs (especially in rural Maine)

and produce new and different ones, often in the suburbs. And meanwhile an extraordinary bout of suburban sprawl is intruding upon the state's storied rural landscape in many areas.

In short, much is unsettled in the state of Maine just now, and that is the story of this chapter of “**Charting Maine's Future.**” Three major trends are detailed:

- **Once stagnant, Maine's population is growing again**
- **Once based on goods production and extraction industries, Maine's is becoming a diverse, innovation-oriented services economy**
- **Once mostly rural, Maine is suburbanizing**

Together, these dynamics describe a state that is neither what it once was nor quite what it thinks it is.

They also describe a moment of anxiety as well as opportunity.



After decades of relative stagnation, the pace of transformation is quickening, the rearrangement of the old order is accelerating.



TREND:

MAINE IS GROWING AGAIN, EVEN AS IT AGES

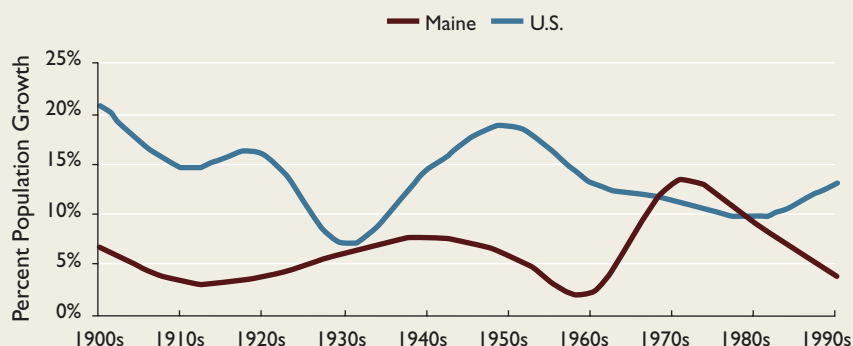
THE STANDARD VIEW:

MAINE'S AGING POPULATION ALMOST ALWAYS GROWS SLOWER THAN THE NATION

In the standard view, Maine is a chronically stagnant state that almost always grows slower than the rest of the country. And it's largely true: Only during the 1970s “back to the land” movement did Maine’s growth rate exceed the U.S. rate in the last century.

In fact, Maine’s population virtually stopped growing in the 1990s, as its growth rate trailed all but four states.

During the 20th century Maine almost always grew slower than the nation



Source: U.S. Census Bureau

In adding 47,000 people for a 3.8-percent growth rate, the state’s population growth surpassed only Connecticut, Pennsylvania, West Virginia, and North Dakota in a decade during which the nation grew by 13.2 percent. Such anemic growth represented a significant slowdown after the 1970s and 1980s, when Maine grew 13.4 and 9.2 percent, respectively—near or above the U.S. rate.

Indeed, while some parts of the state grew faster than others, all regions grew more slowly than the national average in the 1990s. Southern and Mid-Coast Maine were bright spots in the 1990s, as they added people at rates of 10.9 and 8.6 percent. However, neither region attained the nation's growth rate. Down East Maine kept pace with the state average, growing 4.2 percent, while Central and Western Maine saw small increases of just 1.4 and 0.6 percent. Northern Maine took the largest hit, losing over 16,000 people or 6.4 percent. In fact, Aroostook County alone lost 13,000 people—over one-seventh of its 1990 population.

Maine has also been losing young adults. The number of 25- to 34-year-olds residing in Maine dropped from about 205,000 in 1990 to 158,000 in 2000, a 23.2-percent decline. Only North Dakota lost a greater share of young adults over this period. To be sure, the size of this age group is shrinking across the nation as large baby boom cohorts are being replaced by smaller “gen-X” cohorts. Still, Maine lost young working-age adults at a rate three times faster than the nation. And the loss has continued: Maine dropped from 45th in 2000 to last in 2005 in terms of the percent of the population aged 25 to 34.¹

Meanwhile, the senior population continues to grow.

At 14.4 percent, the share of Maine's population that is 65 and older ranked seventh in the nation in 2000 and exceeded the U.S. figure by two full percentage points. To put that in context, the percentage of Maine's population age 65 and over increased by the fourth-highest amount in the 1990s, a change that trailed only that posted by Hawaii, Alaska, and Wyoming. While 2005 estimates show a slight decrease in the elderly percentage of the population, the state moved up two spots to fifth nationally on this measure. And Maine now ranks as the oldest state in the nation with a median age of 41.2, almost five years older than the U.S. figure.²

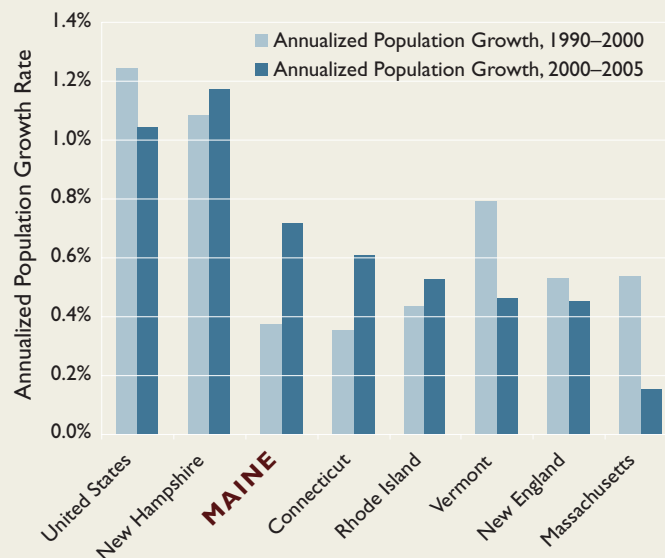
A CLOSER LOOK:

MAINE IS GROWING

A closer look reveals that Maine is now experiencing a significant increase in population growth. Since 2000, the state's growth rate has nearly doubled. Based on annualized growth rates, Maine jumped 20 places from 46th in the 1990s to 26th since 2000—by far the biggest turnaround in the nation (only Connecticut came close, climbing 15 spots to rank 32nd). The state's 0.72 percent annual population increase from 2000 to 2005 outpaced all New England states except for New Hampshire, which is growing at 1.17 percent per year.³

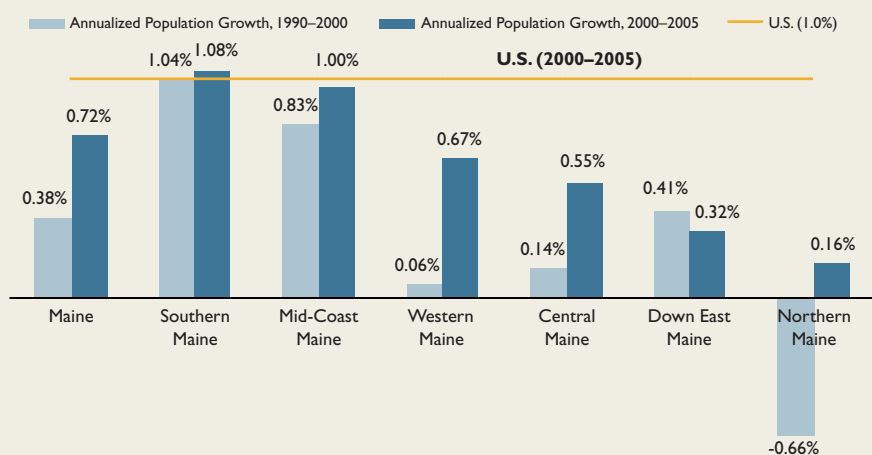
In fact, all Maine regions are now growing, though southern regions remain the state's fastest-growing areas. Leading the way are the Southern and Mid-Coast regions—now growing by 1.1 and 1.0 percent annually, surpassing or matching the 1.0 percent pace of the U.S. and easily outperforming New England's 0.5 percent annual growth rate. Within Southern Maine, York County is now increasing its population by 1.6 percent per year, over 50 percent as fast as the nation. For their part, the Mid-Coast counties of Lincoln, Sagadahoc, and Waldo are all meeting or exceeding the U.S. growth rate with gains at or above 1.0 percent per year. Every other region has also been growing. Down East Maine continued on its recent path, recording slow but

Since 2000, Maine's rate of population growth has surpassed that of all the New England states but New Hampshire



Source: Brookings analysis of U.S. Census Bureau data

All Maine regions are now growing; population growth rates in most regions have increased substantially since 2000



Source: Brookings analysis of U.S. Census Bureau data

Maine's accelerating in-migration rate ranks it just behind fast-growing Sun Belt and Rocky Mountain destinations

Rank		Domestic Migration Rate per 1,000 Residents, 2000–2004
1	Nevada	23.3
2	Arizona	12.2
3	Florida	11.4
4	Idaho	7.2
5	Maine	6.3
6	New Hampshire	6.1
7	Delaware	5.9
8	Georgia	4.8
9	North Carolina	4.7
10	South Carolina	4.6

Source: U.S. Census Bureau

steady annual gains of 3 percent. Meanwhile, Western, Central, and Northern Maine all posted significant population turnarounds. Northern Maine, for its part, reversed course, moving from annual losses of over 1,600 people a year in the 1990s to gains of nearly 400 people per year since 2000. Noteworthy, however, have been the continued population losses in Aroostook and Washington counties. But even here there has been something of a turnabout: Both of these traditionally struggling counties began growing for the first time in years in 2002.⁴

Driving the new growth has been a quickening of in-migration to the state, which is now over seven times larger than natural increase. This represents a major change in Maine's demographic situation. After all, following on the state's average net loss of 440 people per year in the 1990s, Maine gained an average of 8,200 net new residents per year between 2000 and 2004—7.5 times more than its average annual natural increase of 1,100 and the largest in-flow in over 50 years.⁵ In fact, the state's domestic in-migration rate of 6.3 residents per 1,000 since 2000 ranks fifth in the country, behind the popular Sun Belt and Rocky Mountain destinations of Nevada, Arizona, Florida, and Idaho, and just ahead of neighboring New Hampshire, which ranked sixth.

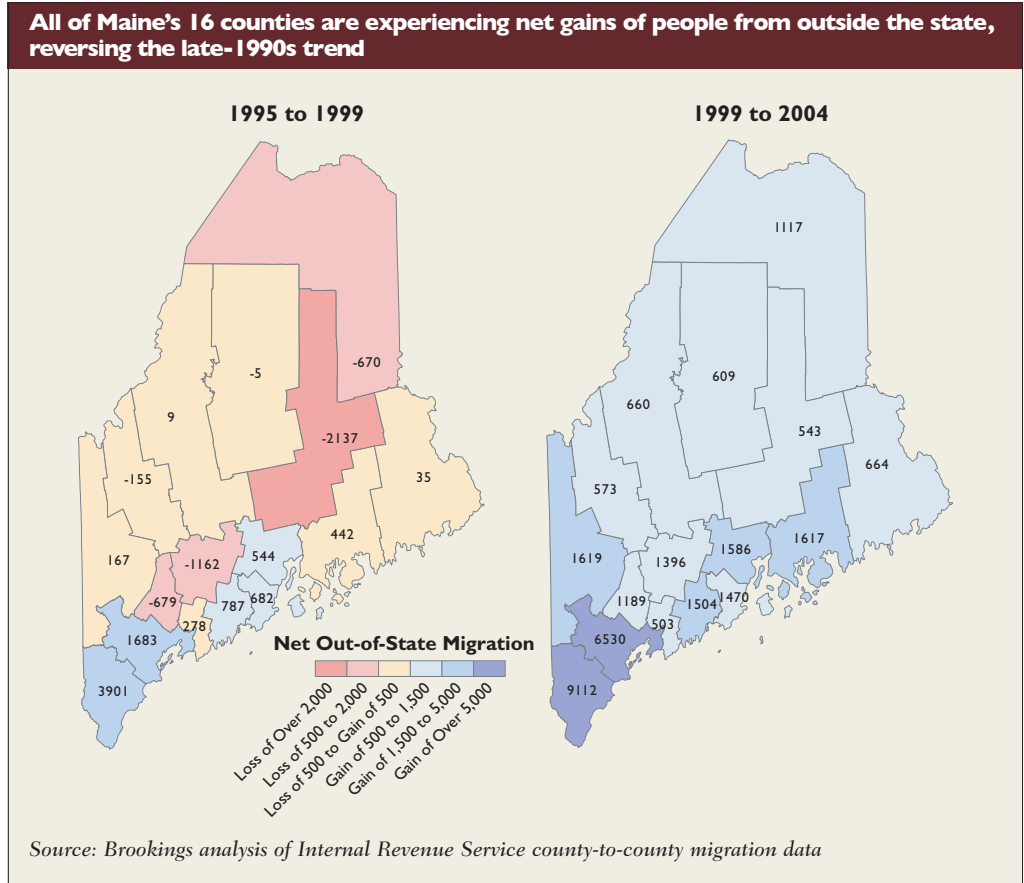
In fact, every one of Maine's 16 counties is now experiencing net gains of people from *outside the state*.⁶ Not surprisingly, York County led the state with a net inflow from other states of over 9,000 residents between 1999 and 2004. But it bears emphasizing that in-migration from other states is now bolstering every region and county. While six counties lost more people to other states than they gained from 1995 to 1999, all saw positive net

in-migration between 1999 and 2004. Indeed, no county added fewer than 500 net migrants. Aroostook County, which experienced a net loss of nearly 700 people to other states from 1995 to 1999, added over 1,100 net in-migrants between 1999 and 2004. Penobscot County turned a loss of over 2,100 people into a gain over 500 in the same period. Beyond that, Cumberland County added over 6,500 net in-migrants and Androscoggin, Hancock, Kennebec, Knox, Lincoln, Oxford, and Waldo counties all received over 1,000 net in-migrants.

These new inflows are altering Maine's traditional regional population dynamics. While many Mainers continue to leave places like Aroostook County for other parts of the state—particularly the south—those from outside Maine are offsetting those internal relocations. For instance, about 4,600 people from Aroostook County moved to other counties in Maine from 1999 to 2004, about 1,300 more than the number of Mainers who relocated to Aroostook. But at the same time, 5,900 newcomers to Maine settled in Aroostook County in those years compared to the 4,800 residents who left “The County” for other parts of the country. This 1,100-person net gain from out-of-state nearly erased the 1,300-person in-state loss. Just as impressive as the migration to the north from out of the state is the accelerating pace of in-migration to Southern Maine. In recent years Cumberland County saw nearly four times as much net in-migration as it did in the second half of the 1990s, adding over 6,500 out-of-staters. And York County more than doubled its inflow, netting over 9,000 new residents from outside Maine in five years.

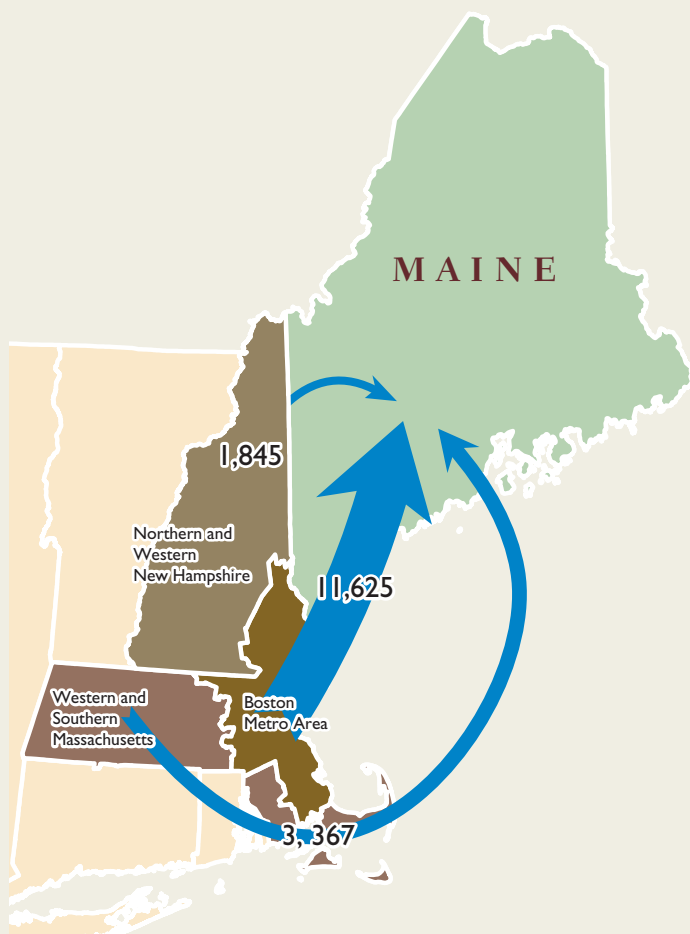
Metropolitan Boston's recent population losses, meanwhile, explain much of Maine's recent gain. The seven counties comprising metropolitan Boston lost over 135,000 people to migration from 1999 to 2004, during which years Maine counties and regions gained over 32,000.⁷ In that sense, Boston's loss has become Maine's profit. In fact, the Boston metro, on net, contributed nearly 12,000 migrants to Maine between 1999 and 2004—some 36 percent of Maine's net inflow.

Another 3,400 net migrants came from the remainder of Massachusetts—including more than 1,100 from Worcester County—while the non-Boston metro remainder of New Hampshire contributed 1,800 despite the absence of a state income tax. In all, net migration to Maine from Massachusetts and New Hampshire brought nearly 17,000 residents to the state, and contributed more than half of the state's net gain.



Massachusetts and New Hampshire contributed more than half of the state's net in-migration between 2000 and 2004.

A net total of 17,000 people migrated to Maine from Massachusetts and New Hampshire between 1999 and 2004



Source: Brookings analysis of Internal Revenue Service county-to-county migration data

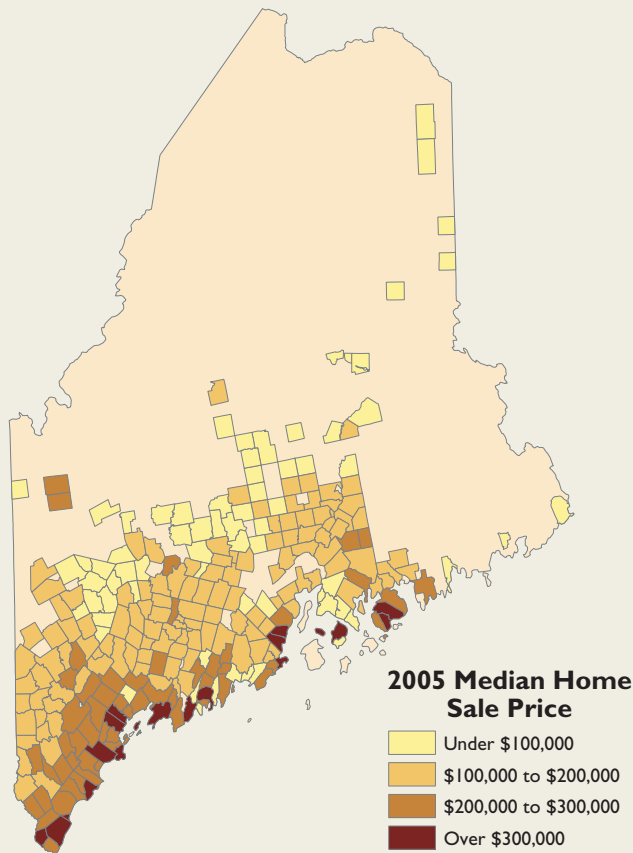
These flows and others are bringing into the state residents with considerably higher household incomes than those of native Mainers. Between 1999 and 2004, new arrivals in Maine enjoyed an average household income of \$48,000 compared to \$46,500 for Maine's non-migrants.⁸ But these figures vary. In-migrants from Middlesex County, Massachusetts—the origin of 3,500 net migrants—had average household incomes of \$55,700, almost 20 percent higher than stationary Maine residents. For their part, arrivals from Suffolk County, Massachusetts, had incomes of \$59,200 a year, and those from Rockingham County, New Hampshire, made \$50,275.

The new demographic reality may also include the return of young adults to the state after their long drift away from it. Most notably, data from the Census Bureau's American Community Survey, an annual survey featuring a smaller sample of the population than the decennial census, suggest that while the state is now receiving in-migrants in all age groups, adults aged 25 to 44 made up a large proportion of the state's net arrivals in the last few years.⁹

Another related development: Housing prices have been rapidly appreciating. From 2000 to 2005, the inflation-adjusted median sales price on a home in Maine jumped from \$125,000 to \$184,000, a 48-percent increase that exceeded the national jump of 39 percent. But the story varies sharply by region. Down East Maine experienced the sharpest appreciation, with real prices increasing 62 percent from \$117,000 to \$189,000. In absolute terms, Southern Maine saw the largest price increases, as real median prices surged from \$148,000 to

\$236,000 between 2000 and 2005—a nearly \$90,000, or 59-percent, increase. Western Maine's prices jumped 50 percent to \$139,000 while Mid-Coast, Central, and Northern Maine all recorded increases of at least 40 percent. Within regions, many towns recorded even higher gains. In Mid-Coast Maine, prices of Boothbay Harbor homes shot up 93 percent to \$274,000 while prices in Rockport jumped 85 percent. Southern Maine towns of Saco and Freeport saw median prices pass the quarter-million dollar mark, up over 55 percent. Even inland towns have witnessed sizable price gains off their lower bases. Bangor's prices rose 66 percent to \$140,000 while Waterford, in Oxford County, saw homes nearly double in value from \$93,000 to \$184,000 in the five-year period.¹⁰

Median home prices in 17 towns now exceed the \$300,000 mark; most towns in Southern Maine and along the coast have median prices that surpass \$200,000



Source: Brookings analysis of data provided by the Maine State Housing Authority

Between 2000 and 2005, the median home price in coastal towns in Southern and Mid-Coast Maine increased by about 56 percent.

Sharpening the impact of rising house prices has been the super-charged appreciation of homes in towns near and along Maine's coast, which has created substantial house-price differentials among towns and regions. Real estate prices in coastal towns have been appreciating far faster than those elsewhere. Between 2000 and 2005, the median home price in coastal towns in Southern and Mid-Coast Maine increased by about 56-percent.¹¹ Similar increases occurred throughout the Southern and Mid-Coast regions while the rest of the state experienced 44-percent gains. Most striking is the explosion of very high-priced homes. In 2000, only one town—Kennebunkport—had median home prices above \$300,000. By 2005, that number had risen to 17 towns, and all were located along the coast. The result is a widening of the state's sharp price gaps. A

nearly \$100,000 real five-year increase in Scarborough, for instance, exceeded appreciation in nearby inland towns by anywhere from \$5,000 to \$14,000. Differentials were even higher further up the coast: Rockport out-paced its inland neighbors of Hope, Union, and Warren by well over \$100,000 each while Camden recorded real appreciation between \$24,000 and \$61,000 higher than those same towns.

WHAT THIS MEANS:

Maine's improved population dynamics validate the appeal of the state's high quality of place and underscore Maine's potential. Population growth and in-migration do not by themselves indicate health or good prospects. Still, to the extent mid-decade demographic trends offer a rough indicator of the relative appeal of a state they provide Mainers grounds for optimism. Maine's recent population growth amounts to improved performance on a basic determinant of economic well-being. In-migration from other states means people outside the state are "voting with their feet" and at least for now rating the state's quality of life on a par with faster-growing, highly desirable Sun Belt locales. And for all the tensions that in-migration from the Boston metro area may create, Maine undoubtedly stands to benefit from such inflows and their close proximity to this affluent, highly-educated region. Related to this is the "golden opportunity" of the state's likely emergence as a destination for healthy retirees and down-shifting baby boomers. In short, the Pine Tree State's new status as a regional destination state bespeaks its high quality of place and provides a welcome opportunity for progress, as new residents may bring new talent, money, ideas, and experiences to a state that has struggled in recent decades.

At the same time, population growth is bringing development challenges and social tensions. Most obviously, an influx of people into towns both large and small puts additional pressure on state, regional, and local infrastructure, planning, and service-provision systems. Some local planning boards in southern Maine are overwhelmed by the growing flow of subdivision applications. Development and its spillovers in a state with nearly 500 small municipalities may exacerbate regional coordination problems. And for that matter the state's immemorial culture clashes between natives and those "from away" may sharpen as the pace of change quickens and the income gap between natives and newcomers widens. Growth in this respect will bring change, and new anxiety, along with opportunity.

Moreover, new vitality—however promising—cannot erase serious long-term demographic challenges.

Particularly troubling is the long-term loss to other states of Maine's 25- to 34-year-olds, a crucial cohort for the workforce. Combined with the state's rapid aging and the fact that many of the state's incoming new residents are likely older baby-boomers nearing retirement, these net out-flows of younger adults portend tough social and economic reckonings. Continued losses of younger Mainers will further thin the ranks of the state's most productive workers, at a time when a major report from the Aspen Institute details employers' increasing dependence on native-born workers to fill their staffs and replace the retiring baby boomers.¹² Likewise, the state's emerging status as a retirement destination implies growing pressure on the state's health care system and social programs. Finally, despite the spread of more growth to more counties, the reality of the "two Maines" persists. Southern and Mid-Coast Maine's recent migration gains, for example, reiterate the extent to which those regions' proximity to Boston increasingly allows them to tap into, and benefit from, the dynamism of the massive "Bos-Wash" corridor, with its hundreds of thousands of young workers and affluent retiring baby boomers. By contrast, though, the much more modest inflows to the vast interior and north of the state underscore the remoteness and continued isolation of that region—and raise again questions of its long-term vitality.



TREND:

ONCE BASED ON GOODS PRODUCTION, MAINE'S IS BECOMING A DIVERSE, INNOVATION-ORIENTED SERVICE ECONOMY

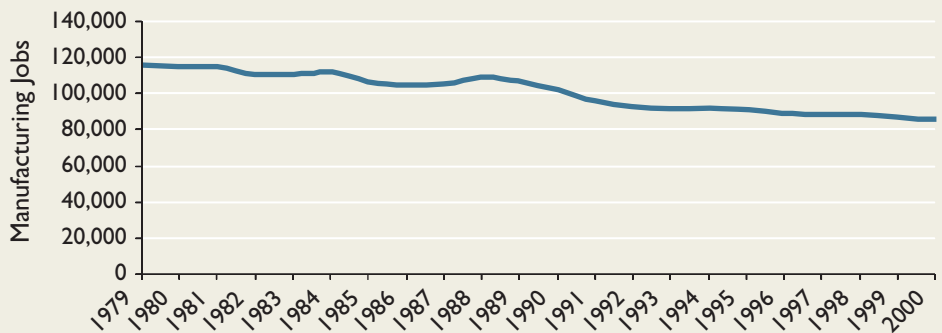
THE STANDARD VIEW:

MAINE'S TRADITIONAL ECONOMY IS DISINTEGRATING, AND NOTHING IS REPLACING IT

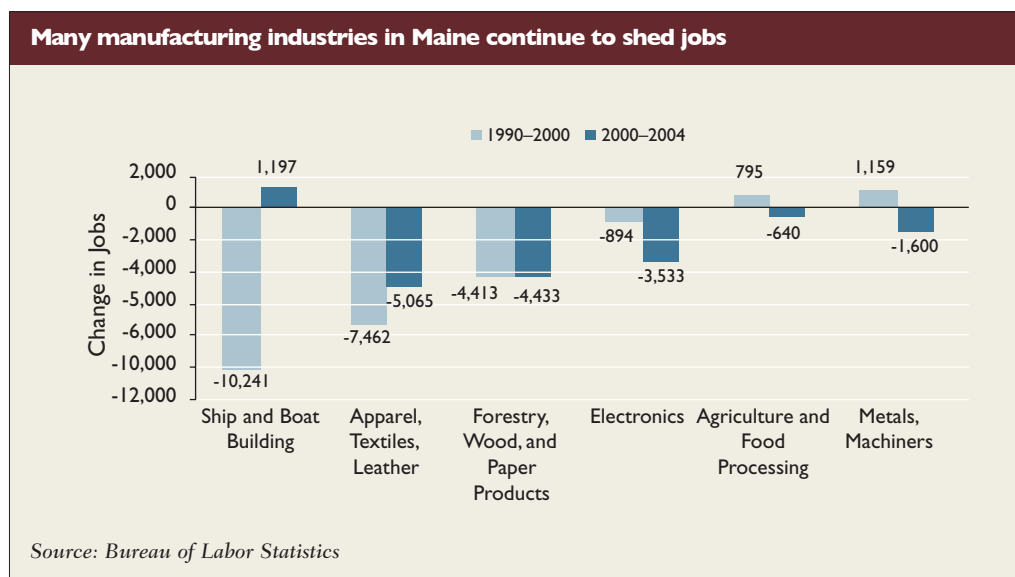


In the standard view, Maine's economy revolves around manufacturing and resource-based industries that are now collapsing. And in fact, the state's manufacturing and natural resource-based industries, which made up over one-third of all private employment as recently as 1970, *did* lose ground in the 1990s.¹³ And with the exception of shipbuilding, which saw a slight increase, all the principal industries in Maine's manufacturing sector saw further job losses between 2000 and 2004. As a result, today Maine has less than 70,000 manufacturing jobs, 35,000 fewer than it did in 1990.¹⁴

Maine has steadily lost manufacturing jobs over the past few decades



Source: Bureau of Economic Analysis Wage and Salary Employment Estimates



Maine is frequently criticized as having a bad business climate, and frequently that is said to explain most of its problems.



The standard view also bemoans the fact that Maine's economy produced only tepid job growth in the 1990s. As it happens, employment in the state, including full-time, part-time, and self-employed workers, rose by a modest 12 percent, or 85,000 jobs, in the decade to reach a total of 792,000 positions. Given that the nation as a whole increased its employment by 19 percent, Maine's much slower percentage increase in job creation ranked just 43rd among the 50 states.¹⁵

Explaining it all in the conventional wisdom are Maine's high taxes and

poor business climate. Maine is frequently criticized as having a bad business climate, and frequently that is said to explain most of its problems. And it is true that Maine's overall tax burden as a fraction of per capita income ranks among the highest in the nation. Moreover, the somewhat controversial Tax Foundation rates Maine as having one of the 10 least business-friendly tax environments among the 50 states.¹⁶

Looking beyond taxes, the state rates only a "C" for business vitality, and a "D" for development capacity, according to the latest "Development Report Card of the States" from the Corporation for Enterprise Development, although the state earned a "B" for economic performance.¹⁷

Accentuating these concerns has been a series of high-profile uncertainties and negative events. During the past year, an unusual series of threats loomed, and underscored Maine's economic vulnerability. The Base Realignment and Closure Commission (BRAC) reviewed the need for Maine's defense establishments. A proposed "winner-take-all" procurement policy threatened Bath Iron Works. Rising energy prices penalized Maine consumers (and visitors). And Bank of America's acquisition of MBNA has led to the closing of several facilities, making many Maine workers fear that they—or someone they know—may see their job disappear.

A CLOSER LOOK:**DESPITE CHALLENGES,
MAINE'S ECONOMY HAS
GROWN AND CONTINUES
TO DIVERSIFY**

Look closer, however, and Maine outperformed the nation during the last economic cycle. Specifically, Maine's economy grew faster or contracted less than the nation every year from 1998 through 2004. Along the way the state experienced a much shorter and shallower recession starting in 2001 than did the rest of the country. In fact, Maine only experienced one year of actual job declines (2002). Unfortunately, Maine's growth slowed in 2005, perhaps held back by the BRAC and MBNA uncertainties: Wage and salary-employment growth was flat.¹⁸

Likewise, unemployment remains below the national average. Maine's statewide unemployment rate has remained at or below 5 percent throughout the recession, a full point below the national peak unemployment rate of 6 percent.

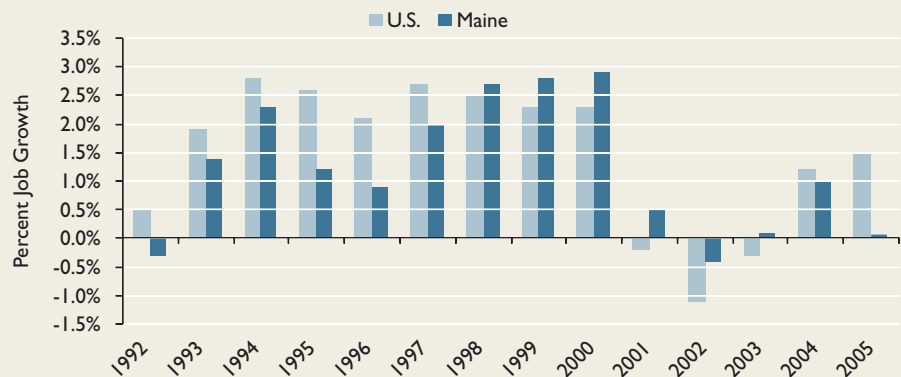
Unemployment in Maine, which paralleled the national average in the mid-1990s, has been significantly below the national average since 1998. Only in the past 12 months, after several years of growth nationally, has the U.S. unemployment rate declined to the level Maine has experienced.¹⁹

And business costs may not be the prohibitive factor they are widely believed to be. The Milken Institute ranked Maine 19th in the country and below the U.S. average in 2005 on costs of doing business—costs that include wages, taxes, energy, and industrial and office rent.²⁰ Looking below the state level, a recent study by KPMG Marketing found Lewiston to be the best city in New England—and 24th in the country—for business start-up and operation costs.²¹

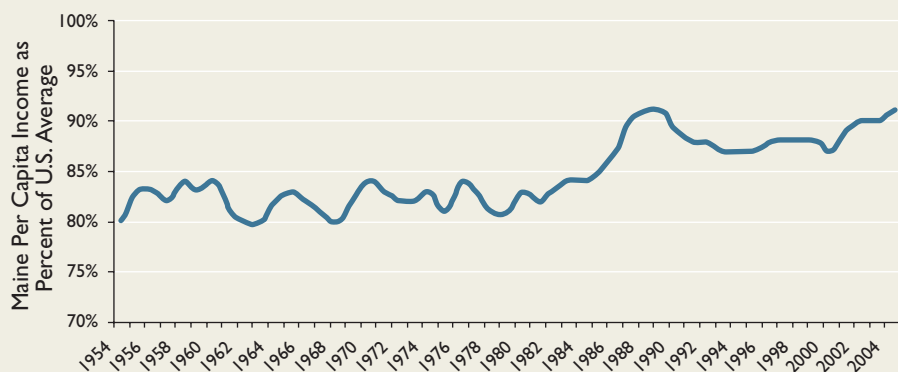
Moreover, the state has weathered several of its short-term challenges. Despite seeing gas prices take a bigger share of consumer income, Maine retail industries continue to grow. Despite significant job cuts for the Brunswick Naval Air Station, BRAC gave strong support to Portsmouth Naval Shipyard in Kittery and made other moves that will bring more defense employment to Maine. Working with Bank of America, likewise, the state was able to preserve most of the bank's jobs in Maine. Although payroll employment remained relatively stagnant, resident employment—which includes those self-employed—actually continued to increase.²²

In fact, recent trends suggest Maine is becoming a popular base for telecommuters. Given that payroll employment and the unemployment rate remained unchanged from 2004 to 2005 while the state's labor force increased by almost two percent, Maine appears to be attracting workers who earn paychecks from firms located outside the state.²³ With a declining share of Maine employees commuting to other states for work in recent years, these data suggest a growing number of telecommuters.²⁴

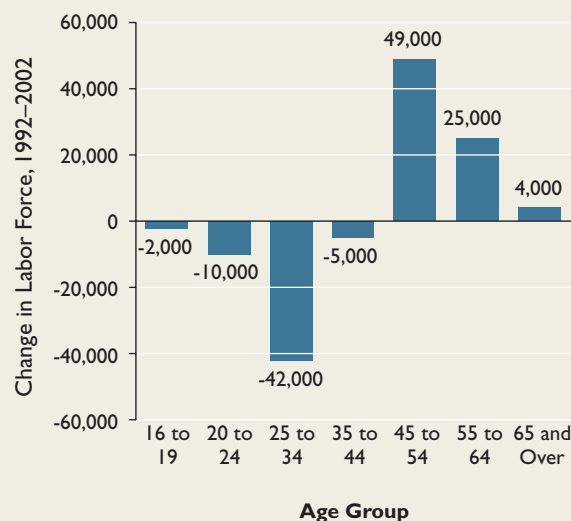
Maine's economy outperformed the nation during the last economic cycle, growing faster or contracting less than the nation from 1998 to 2004



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

Maine's per capita income stands at a 50-year high relative to the U.S. average

Source: Bureau of Economic Analysis Local Area Personal Income Data

All of Maine's recent workforce growth has occurred among older age cohorts

Source: Maine Department of Labor

Even more auspiciously, Maine's per capita income now stands at a 50-year high relative to the U.S. average. Putting Maine's income levels in historic perspective is revealing, in this respect. Over the past half century, Maine's income level has never exceeded, or even approached, the national average. But it has improved: Income levels averaged 80 to 85 percent of the national average from the 1950s through the early 1980s, but have moved up since then. In 2004, Maine's per capita annual income of \$31,250 stood at 91 percent of the national average, matching the 50-year highs recorded in 1988 and 1989. And Maine's standard of living is higher than ever: Real per capita income in 2000 was 68 percent higher, adjusted for inflation, than it was in 1970.²⁵

Now to be sure, Maine faces serious workforce challenges that begin with its rapid aging. Over the past decade, all of the net increase in employment has been workers 45 and older. In fact, due to the smaller size and out-migration of younger cohorts, the number of workers under age 45 has declined by 60,000 since 1992.²⁶

And rising incomes are not translating into better circumstances for many working families. While per capita incomes continue to increase, wages remain stagnant and median household incomes are declining. Maine's lowest-paid workers—those in the bottom-fifth of all wage-earners—saw their wages increase by only 2-percent between 2000 and 2004, well below the 9.7-percent rate of inflation. And from 2000 to 2003, Maine's median household income fell by 8.8-percent, a decline almost four times larger than the nation's over the same period. Contributing to this stress is a continued loss of relatively high-paying jobs: Between 2000 and 2004, despite net job gains in all industries, the state lost 5,677 net jobs in industries that paid at least \$50,000.²⁷

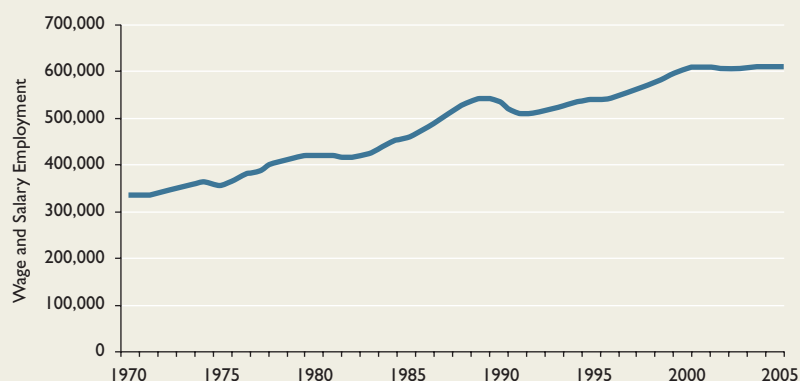
Still, Maine's long-term growth path is positive. Despite declines in some high-profile industries, and

despite problems with pay levels and overall dynamism, Maine's economy has actually been expanding in recent decades. In 2005, for example, total wage and salary employment in Maine exceeded 600,000 positions, reflecting the addition of more than 100,000 jobs to the state's late-1980s employment level. This expansion, although slower than the nation's, represents genuine progress considering the state's slow population growth.²⁸

Shaping this trajectory, meanwhile, are the dynamics of three underlying “super sectors”—groupings of industry clusters and firms that power Maine’s economy. These super sectors constitute the state’s economic base and can be divided into three major segments: goods production, consumer services, and business services. Together, these three broadly defined super sectors account for 41 percent of all employment in Maine and nearly 47 percent of all wages—shares that make them more important to Maine’s economy than they are to the national economy. (By contrast, only 36 percent of U.S. jobs lie in the three super sectors, which generate only 40 percent of all wages.)²⁹ The super sectors also encompass about one quarter of small firms and about 40 percent of large firms. More importantly, each of these bundles of firms and industries acts as an economic driver because each contains a portion of the state’s “traded” sectors—those that bring income into Maine from outside. Goods producing industries like manufacturing sell products to customers in other states and nations. Consumer and business service firms are also part of the state’s export base because they, too, bring new income and wealth into the state, whether through the tourist trade, financial activity, or transfer payments from the federal government.

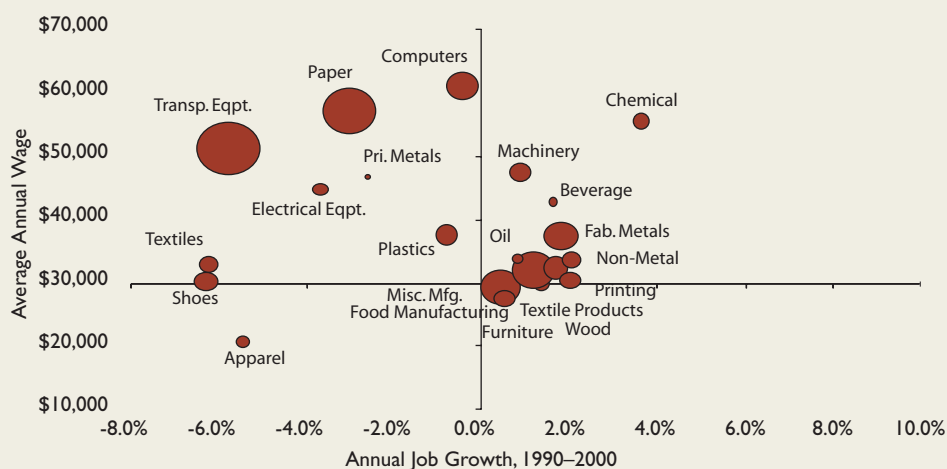
Goods producing industries employ fewer workers, but are more productive than ever. Goods producing industries include the bulk of traditional Maine manufacturing activities, including paper, wood products, ship-building, electronics and apparel. Once much more dependent upon these industries than the nation, Maine’s current 12-percent share of employment dedicated to goods production is essentially the same as the U.S. share (11.2 percent).³⁰ Although manufacturing employment has been declining in Maine, the jobs that remain are increasingly productive. Average manufactur-

Maine’s economy has expanded in recent decades; more than 100,000 jobs have been created since the late 1980s



Source: Bureau of Labor Statistics

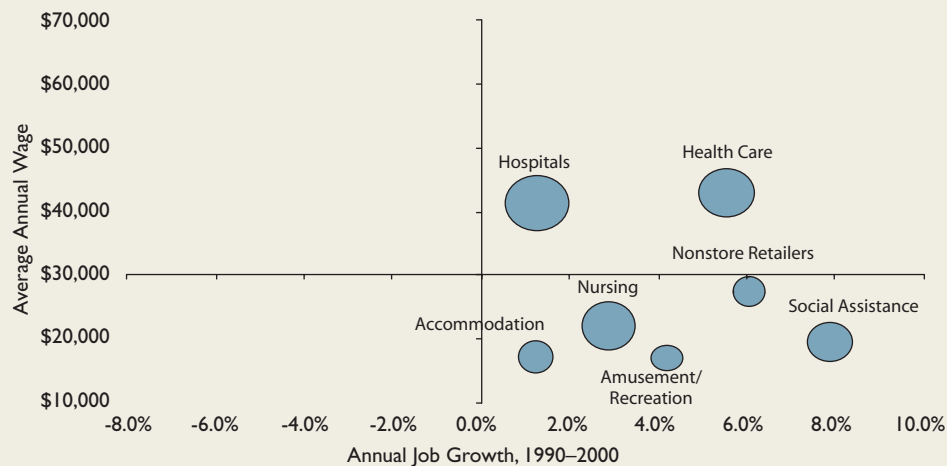
Goods production jobs pay well, but the largest industries are shedding jobs



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

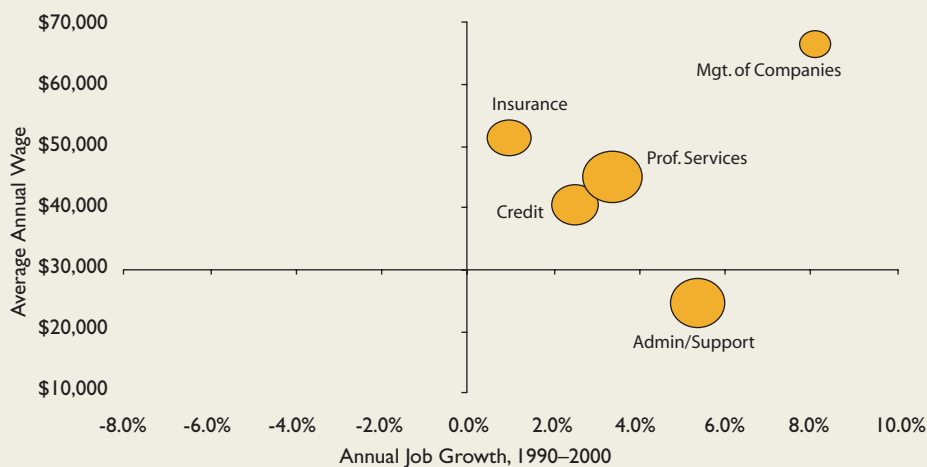
ing productivity,—the amount of output produced per worker—has more than tripled from \$20,000 per year in 1970 to more than \$60,000 per year in 2000. Because job losses have been heaviest in those industries that were the traditional giants of Maine manufacturing (like paper and apparel) Maine today has a far more diversified manufacturing sector than ever; it is now less dependent on any single industry that at any time in its past.³¹ Most manufacturing industries pay wages that are about one-third higher than the state average.³²

All of Maine's consumer services industries are growing, but many pay below the average wage



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

Maine's business services industries are growing and pay well (though they remain only a small part of the Maine economy)



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

Consumer services industries are a major source of job growth for Maine. Consumer services include the income generated in Maine by tourism and recreation, retirement, and health care. While we don't ordinarily think of consumer services as part of a state's traded-sector economic base, these industries play an unusually important role in Maine. All these industries bring income into the state from away. Tourism generates visitor spending from other states. Retirees bring accumulated wealth earned in other states (and a stream of social security income). And much of the Maine health care system is financed by payments from the federal government through its Medicaid and Medicare programs. Consumer services have been one of the fastest growing

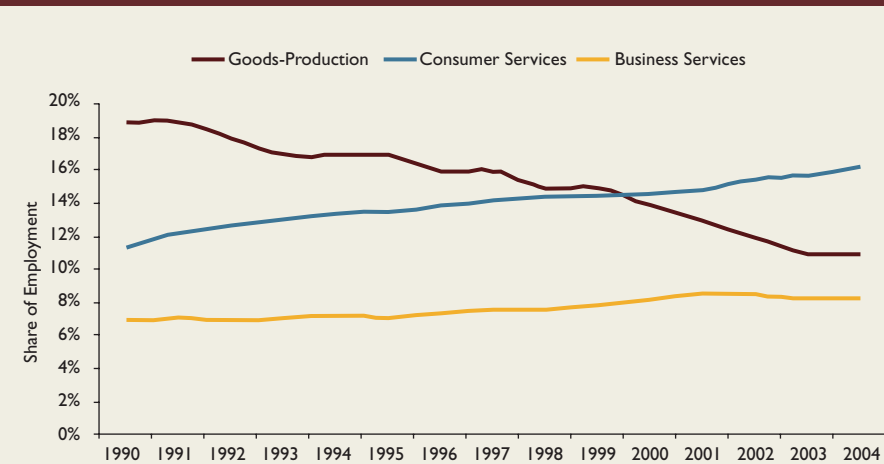
sources of jobs in the Maine economy: health care-related employment has increased by 12,000 jobs since 2000, growing over seven times as fast as the Maine economy. Overall, consumer service jobs pay about \$30,000 per year, slightly less than the state average. Consumer services include a mix of low-wage and high-wage jobs—some health care jobs are well-paid; most jobs in tourism and recreation are low paid.³³

Business services industries provide relatively high-wage employment opportunities. Business services include financial and professional services, including banking, insurance, engineering, and advertising. In the aggregate, financial and professional services have been growing faster than the Maine economy. Most of the jobs in this industry sector pay relatively high wages. For example, the average wages in professional and technical services, a category that includes a wide range of business services, is \$45,000 annually, nearly 9 percent more than the average for manufacturing jobs, and about 20 percent more than the average private sector job in Maine.³⁴

Changes in the relative size of these super sectors of firms and industries have greatly altered the profile of Maine's economy. Maine's economic base, in this respect, has been transformed in the past two decades. Most notably, the share of gross state product arising from manufacturing has plummeted while that associated with consumer services has risen. In 1980, for example, manufacturing accounted for 24.9 percent of gross state product. By 2004, this share had fallen by more than half to 11.9 percent.³⁵ In terms of employment, the number of Maine workers employed in goods production has fallen from one in five in 1990 to about one in ten in 2004. In this respect, steady declines in goods production, combined with steady growth in consumer services (particularly health care) have now reversed the positions of these two industries. The

result is that since the late 1990s consumer services have employed more workers than goods production. For its part, the business services sector has grown too, but remains a smaller section of the Maine economic base. Maine's industry profile differs markedly, moreover, from that of the nation. While both the nation and Maine employ about the same percent of their workforces in goods production and business services, Maine's 21-percent share of employment in consumer services exceeds the U.S. mark of 15 percent.³⁶ The upshot: Maine jobs are disproportionately located in the lower-paying consumer-services industries.

Changes in the relative size of Maine's super sectors have altered the shape of the state economy; consumer service jobs are growing while employment in goods production continues to decline



Source: Bureau of Labor Statistics *Quarterly Census of Employment and Wages*

Among other things, shifts in the relative size of these major sectors have contributed to Maine's low pay levels.

Most starkly, the declining share of the state's workers employed in well-paid goods-producing industries has meant that proportionately more workers are now employed in the lower-paying but fast-growing consumer services industry. In this fashion, some of the state's biggest job losses have been in the paper industry (more than 3,000 jobs lost between 2000 and 2004; average wage: \$57,100), while some of the biggest gains have been in low-wage industries like nursing and residential care facilities (over 2,000 jobs gained; average wage: \$21,900). This broad shift has depressed Maine wages compared to those of the nation. Otherwise, the state's developing business services super-sector has largely been going sideways since the national economic peak in 2000, but offers hope of good-paying job-creation. This supersector provides jobs that pay about \$45,000 per position. Areas of past growth include architecture and engineering services (2004 average wage: \$49,800); management consulting (\$52,000); and insurance (\$53,500).³⁷

Maine jobs are disproportionately located in the lower-paying consumer-services industries.

Such transformations have also widened the gap between the “two Maines.” So far, Southern Maine has been better positioned to profit from shifts in Maine's economic base. Southern Maine—Cumberland and York counties—accounts for a disproportionate share of the state's faster-growing business and consumer services industries. Goods producing and natural resources industries, in contrast, which have been shedding jobs, remain disproportionately located in the “rest of Maine.” As a result, Southern Maine accounts for 36 percent of Maine's population, but 41 percent of total Maine employment, 50 percent of the state's business services employment, 38 percent of consumer services employment, and only about 33 percent of goods production. For its part, the “rest of Maine” continues to absorb a disproportionate share of Maine goods-production losses, even as it lands disproportionately few of the new profes-

sional and business services jobs. Along these lines, the shift in Maine's economic base has also driven faster growth in Southern Maine, and produced greater economic dislocation in the rest of the state. Southern Maine has added jobs twice as fast as the rest of the state, with employment increasing 1.3 percent since 2000, compared to 0.6 percent statewide. Unemployment in Southern Maine is 3.6 percent, compared to 4.6 percent statewide, 5.5 percent nationally, and over 5.5 percent in much of rural Maine.³⁸

Also shaping Maine's economy are the state's industry clusters—groups of interrelated or similar small and large firms in traded sectors whose interactions determine regional economic success. Clusters are defined by intricate buyer-supplier relationships between companies, common skill needs and technologies, or firms' similar mar-

RURAL MAINE: LIKE MAINE, ONLY MORE SO?

All of the challenges that confront Maine's changing economy apply with extra force in rural Maine—the historic base of Maine's storied natural resource and manufacturing economies.

- Maine has struggled with shifts in its economic structure, but rural Maine has suffered more because of its greater reliance

on traditional industries. Since 1970, in fact, the state has lost some 44,000 manufacturing jobs and 18,000 jobs in natural resources industries, including farming, forest products, and fishing—over one-third of traditional employment.³⁹ Rural Maine absorbed the bulk of the losses.

- Maine pay levels have grown only haltingly

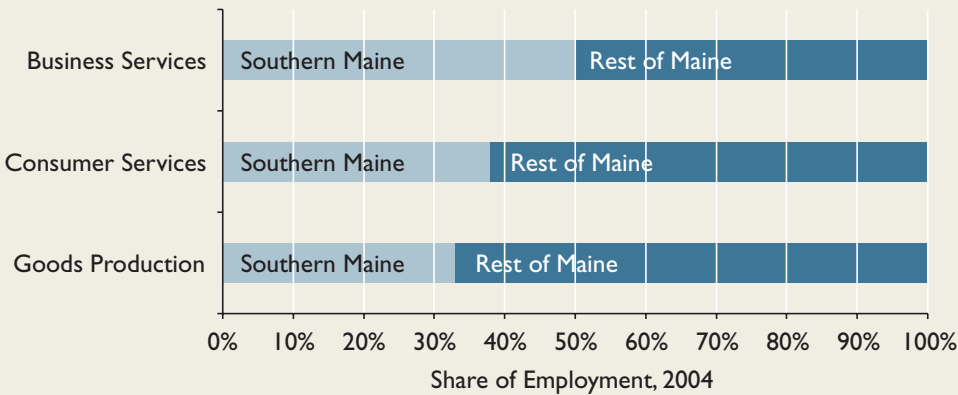
over time, but pay in rural Maine has barely grown at all. In fact, from 1970 to 2004, several rural Maine counties experienced inflation-adjusted growth of less than one percent. Average annual wages in Aroostook and Washington counties actually decreased.⁴⁰

- Maine faces tough demographic and workforce challenges, but rural Maine faces even tougher ones. Demographically, Maine is old, but rural Maine is older still. Likewise, college attainment among working age adults is just 21 percent in rural Maine, compared to 25 percent statewide and nearly one in three in urban Southern Maine.⁴¹

In this respect, rural Maine has borne the brunt of both Maine's struggle to contend with global competitive pressures and its ongoing structural evolution from a manufacturing and resource-oriented economy based on land, water, trees, and fisheries to one centered on services and knowledge. As a result, conditions in rural Maine have actually been deteriorating in comparison with those in Southern Maine. Unemployment rates have increased in seven



Though Southern Maine—Cumberland and York counties—is home to just 36 percent of the state's population, half of the state's business services jobs are located there



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

rural Maine counties since 1990, with Piscataquis, Somerset, and Washington counties now contending with rates between 7.3 and 8.4 percent.⁴² Meanwhile, rural Maine managed to enlarge its job base by just 11.8 percent between 1990 and 2004—barely half of the growth posted by Southern Maine. Aroostook County, in fact, lost over 3,000 jobs during this time.⁴³

And yet, if rural Maine's struggles have been a heightened version of the state's overall, so likely is rural Maine's way forward similar.

Just as the state must nurture and grow its clusters of innovation industries and firms, so too must rural Maine in order to reduce dependency on commodity-producing industries so susceptible to global price fluctuations.

Just as the state must produce higher-value goods and services to remain competitive, reconstruction of the rural economy requires the same effort. Rural Maine enterprises must move higher up the value chain, revamping traditional industries and transitioning into more specialized and innovative product offerings. Farmers may want to move toward cold crops

and organic agriculture instead of conventional crop production. Entrepreneurs who cater to tourists will want to continue exploring important opportunities in eco-tourism, destination tourism, and "experiential tourism" (enhanced by Maine's reputation for authenticity) to complement traditional hunting, fishing, and camping. And the forest products industry must continue its drive to move beyond basic paper and pulp production to develop new specialty products, such as advanced composite decking materials.

Moreover, just as Southern Maine must better prepare its workforce for jobs that demand more education and higher skill levels, so too must rural Maine. This requires not just increasing higher educational attainment and technical know-how, but finding ways to hold onto and attract the talented young people and workers so often lured away in the past.

But can rural Maine create the kinds of high-value jobs that can compete in the global marketplace and attract talented employees?

In many areas, it already has.

Tex Tech Industries in North Monmouth

produces advanced materials for organizations like Boeing, Gulfstream Aerospace, and the U.S. Department of Defense. Now 260-employees strong with an international presence, the company is expecting to expand and recently received a \$750,000 grant from the U.S. Department of Defense for ballistics research.

In Presque Isle, Maine Mutual Group—once a small local insurance company—has grown to serve all of New England with 1,300 licensed agents in 270 locations.

And other small businesses are emerging throughout rural Maine in industries such as forest bioproducts, marine research, and specialty foods, taking advantage of its abundance of natural resources and quality of place.

To be sure, traditional industries like forestry and paper-making will play a role in rural Maine's economy for years to come. But these industries will never again be as important as they were in the past. A prosperous future for rural Maine—just like the state as a whole—requires entrepreneurship, innovation, and skills, along with successful strategies to nurture promising, high-value endeavors. ■

kets. Clusters matter because their size, vibrancy, distinctiveness, and innovation heavily influences a region's economic competitiveness. Ultimately, in fact, the success or failure of a region's industry clusters will largely determine whether a region's economy will succeed or fail at producing greater numbers of higher-quality jobs over the long haul.

Maine's emerging clusters and key sectors grew in the 1990s, providing hope for a higher-paying future for the state's economy. Several technology clusters generated significant numbers of jobs in Maine between 1990 and 2000. The information technology cluster expanded by nearly 3,000 jobs; biotechnology added 600; precision manufacturing firms added over 1,000 jobs. Meanwhile, the state's more traditional clusters posted even larger gains. Jobs in non-store retailers increased from 4,700 to 8,600. Both tourism and finance and insurance clusters added about 4,000 jobs. And Maine's sizable health care industry grew by over 26,000 jobs in the 1990s.⁴⁶ Continued growth in these important economic engines has the potential to improve incomes: Average wages in Maine's traditional and technology clusters surpass the state average by 12 percent.

Critical to Maine clusters' growth and growth prospects, meanwhile, is the growth of small businesses.

Maine is more and more a small business state, and its clusters and core industry sectors are no exception. In the information technology cluster, for example, more than two-thirds of Maine firms have one to three employees and only one in twenty has more than 50.⁴⁷ And the predominance of small businesses is likely similar in other clusters, especially when it comes to growth. Today, firms with less than 500 workers

CLUSTERS OF ADVANTAGE

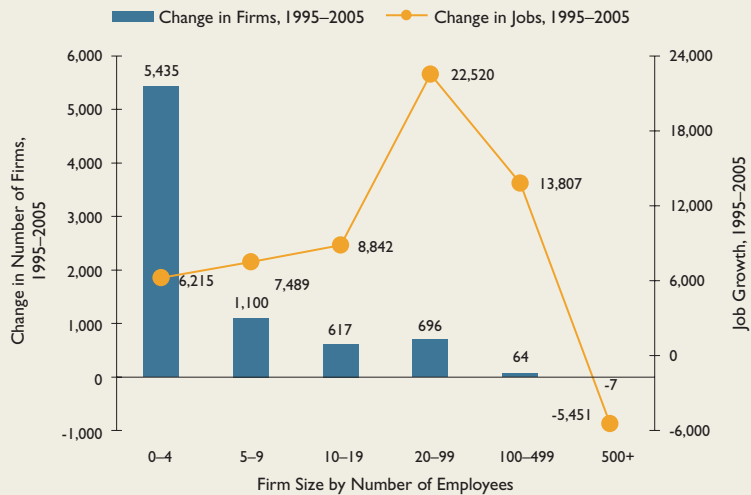
What are industry clusters and why do they matter so much to Maine's future? The short answer is that clusters are geographically concentrated groups of similar or related firms whose synergies can create formidable economic advantages for state and regional economies.

Studies show that businesses flourish not individually and independently, but as part of "clusters" of competing firms, talented workers, entrepreneurs, and support institutions. Along these lines, numerous analysts stimulated by the Harvard Business School professor Michael Porter often observe that the economic impact of a concentration of related firms—whether it be boat-builders in Maine, high-tech companies in Silicon Valley, or automakers in Japan—"is frequently greater than the sum of its parts," as a team led by Charles Colgan of the University of Southern Maine has written of Maine's technology clusters.⁴⁴ A concentration of firms promotes shared learning and intensifies competition, for example. Likewise, such a bunching of employers facilitates specialization and promotes the development of industry-specific skills. Most importantly, clusters frequently generate new ideas—and often new firms—that lead to further economic growth.⁴⁵ That trait makes clusters even more important as the global economy increasingly turns on the proliferation of great ideas.

As to Maine's economy, this report considers in its assessments eleven principle industry clusters, each crucial to the state's traded sectors. Seven of these clusters are the seven "technology" clusters defined by the State of Maine nearly a decade ago and systematically assessed by Colgan's team. These technology clusters include information technology, biotech, forest products, agriculture, marine and aquaculture pursuits, advanced materials and composites activities, precision manufacturing, and environmental technologies. Beyond those seven concentrations of companies, this report adds to Colgan's list four additional groups of more traditional firms, which are deemed equally crucial to the economy even though some may argue they don't constitute fully interlinked "clusters." These major sources of employment and innovation are the state's non-store retailing cluster (which includes L.L. Bean), tourism, health care, and the finance-insurance industry. All are clusters of advantage. ■



Most Maine companies are small businesses, but a majority of the state's job growth is occurring in larger firms



Source: Maine Department of Labor

employ more than three in five Maine private-sector workers—one of the highest rates in the nation. Moreover, firms with fewer than 500 employees produced virtually all of the state's job growth in the last decade. For that matter, very small enterprises play an especially important role in Maine clusters and export sectors. Firms with fewer than 20 employees now account for 24 percent of Maine employment, the seventh-highest percentage among the 50 states. (Nationally, only about 18 percent of private sector workers are employed by firms with 20 or fewer employees.) Growing small firms into somewhat larger firms will be crucial to the success of Maine's economy.⁴⁸

Economy Index," Maine ranked 40th among the 50 states in the share of all employment in gazelle firms—businesses that recorded annual sales growth of 20 percent or more for four years. In Maine, these firms contributed just 11.9 percent of all employment in 2001, compared to 15.4 percent in Massachusetts, 14.5 percent in New Hampshire, 13.9 percent in Vermont, and 13.8 percent nationally. In top-ranked Washington, gazelle firms contributed 16.5 percent of the state's employment.⁵¹

However, small-business formation has slipped in recent years, hinting at problems in the entrepreneurship, innovation, and firm-growth game. *Maine remains above average on small business formation, but its production of new enterprises has been sliding.*

Most notably, while Maine remains above average on small business formation, its production of new enterprises has been sliding. In 2000, the state ranked 14th among the 50 states (with about 7.72 new firms per 1,000 employees)—significantly higher than its 2004 ranking of 21st with six new firms per 1,000 workers.⁴⁹

Also disturbing are indications that the state's very small firms do not tend to grow as energetically as do firms in other states. Data from the Maine Department of Labor, for example, reveal a fall-off in job creation among firms of between 10 and 20 employees, compared to firms both smaller and larger.⁵⁰ Moreover, Maine ranks relatively low in the formation of the fast-growing, often smaller, "gazelle" firms that produce large shares of the nation's new jobs. The presence of these firms offers an important indicator of economic dynamism and likely broader job creation. Unfortunately, according to the 2002 "State New

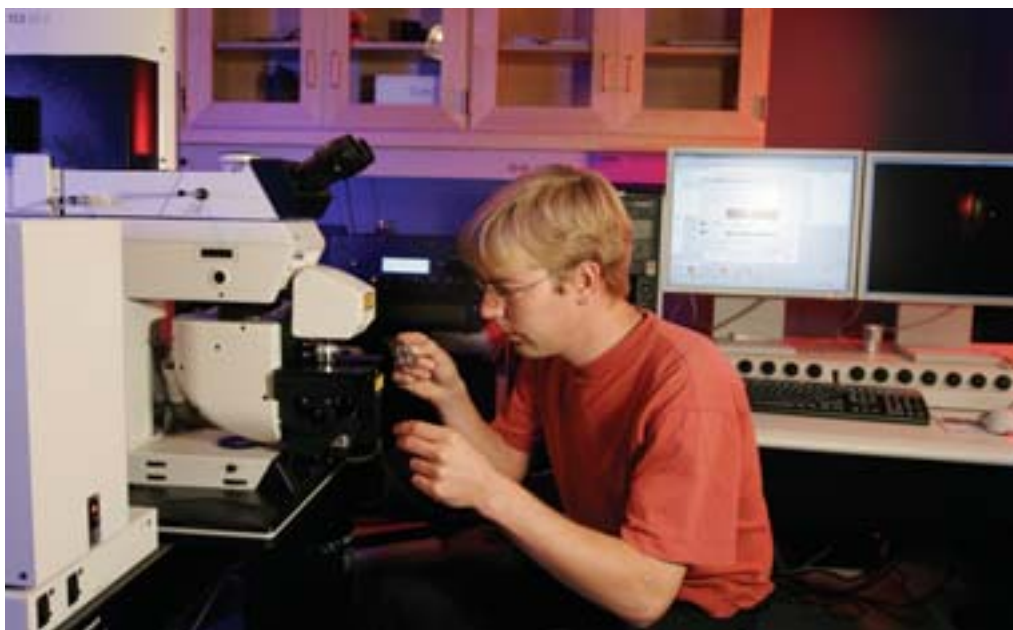
WHAT THIS MEANS:

Maine's economy is growing and diversifying. Contrary to much hand-wringing, Maine's economy is, in fact, growing, diversifying, and evolving. For nearly a decade the state has mostly outperformed the nation on job growth. Per capita income is at a high. Maine's economy, moreover, is now less dependent on manufacturing than at any time in a century, and though smaller, its manufacturing base is more diverse, more highly skilled, and more productive than ever. Consumer and business service segments of the economy are also growing, and providing a wide range of jobs. More broadly, Mainers are increasingly entrepreneurial and investments in research and development (R&D) are rising, ensuring that many Maine companies and industries have become increasingly innovative in developing products and technologies and exploiting new markets. In sum, Maine may have already faced its most wrenching economic changes.

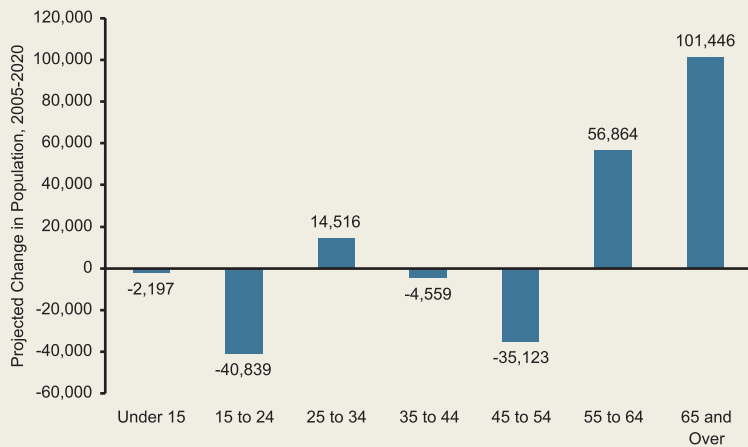
At the same time, the vastness of the changes reorienting Maine's economy underscores that it's a whole new ballgame now. No longer do the state's storied natural resources and manufacturing sectors anchor the economy, and neither will they bounce back to previous levels. No longer will large, traditional firms predominate and deliver prosperity. Consequently, Mainers must embrace change, and recognize that the state's next economy is unlikely to resemble its old one. Given that, the state of Maine, like the rest of the country, must assume that the jobs and clusters it will grow in the future, and whose care and feeding it must tend to, will be very different from those of the past:

- *Few growth sectors will involve low-skill mill jobs; many will produce higher-skilled service jobs.* Good-paying jobs throughout the economy will increasingly require the higher levels of skills and more formal training necessary to support constant innovation
- *The biggest job growth opportunities will be in consumer and business services.* The inexorable shift to an economy driven primarily by business and consumer services is well-underway in Maine, and this trend is not abating. The factors driving the growth of the service sectors of the Maine's economy—in-migration, rising incomes, globalization, the labor intensity of most services—are all expected to continue
- *A variety of small and innovative emerging companies and industry clusters will matter relatively more to job creation and prosperity.* All businesses have to innovate to succeed in the new economy, but a key implication of the shift to a knowledge economy, given Maine's small size and diverse economic base, is that much of the growth will have to come from the entrepreneurship and initiative of Maine's smaller businesses, and entrepreneurial startups

In sum, Mainers don't have the option of turning the clock back, or recovering the kind of economy they once had. Instead, they must build a new one, based on the growth of thousands of small, innovative Maine enterprises.



Maine's population aged 25 to 54 is projected to decline between now and 2020; meanwhile, the elderly population is expected to climb by over 100,000



Source: Brookings analysis of U.S. Census Bureau data

Inevitable demographic change will also shape much of what happens.

On the one hand, Maine's future economic growth is likely to be constrained by labor force shortages. Maine's aging workforce, after all, is more vulnerable to the coming retirement of the baby boom generation than most other states. On the other hand, Maine's attractive quality of life and proximity to major population centers in the Northeast ensures that it will experience substantial in-migration in coming years. Younger people and families may already be arriving, bringing with them useful skills. Meanwhile, nearly 16 million baby boomers will reach retirement

age in the Northeast over the next two decades, and may look northwards. Their sheer numbers, coupled with their unprecedented wealth and higher levels of health and longevity, will make boomer retirees a powerful economic force in Maine.

Crucial to success going forward will be the ability of Maine workers, firms, and industry clusters to innovate. Innovation matters because it is the key to productivity, survival, and prosperity in every segment of the economy. In the forest products industry innovation entails retooling sawmills to efficiently produce white pine lumber for the nation's building supply giants. In agriculture, innovation entails employing state-of-the-art machinery to produce frozen French fries. And, in the marine sector, it involves manufacturing high-end boats and weather-resistant decking from composite materials. For that matter, reinvention in the consumer and business services sectors helps drive growth through the development of advanced medical devices and new eco-tourism packages or proprietary financial processes.⁵² In any event, innovation is pervasive, continuous, and mostly small-scale. Innovation is not just the province of a few high-tech industries; it is essential to nearly all Maine businesses, whether urban or rural, resource-based or knowledge-driven. Nor does innovation occur only once. Instead, the global economy requires continuous learning and innovation—the competitive bar is always rising. And innovation isn't about one or two big research ideas replacing the entire Maine economy. Far from it: Innovation also encompasses the steady stream of small ideas that can boost Maine's productivity, develop new markets, and generate new sources of income and profit for Maine businesses and workers.

Innovation is not just the province of a few high-tech industries; it is essential to nearly all Maine businesses, whether urban or rural, resource-based or knowledge-driven.

TREND:

MAINERS ARE SUBURBANIZING AND SPRAWLING THROUGHOUT THE STATE



THE STANDARD VIEW:

MAINE REMAINS A RURAL STATE

In the standard view, Maine remains an intensely rural state of pristine landscapes and small towns. And that's true in many places: From the open fields of Aroostook County to the great northern forest, western mountains, and remote Down East fishing villages, Maine ranks as the second most rural state in the nation, just behind Vermont, according to the U.S. Census. Altogether, nearly 60 percent of the state lives in Census-defined rural territory—a share that places Maine in the company of other rural states like West Virginia, Mississippi, South Dakota, Arkansas, and Montana. Density measures, meanwhile, confirm the impression. Maine's low density of 41 people per square mile makes it the most sparsely populated New England state and the 38th least-dense state in the country.

Even where the state is urban, it is not heavily so. Greater Portland, the state's largest urban area, ranks as only the 91st most populous metropolitan area in the country.⁵³ Maine's two other metro areas, Bangor and Lewiston-Auburn, rank 252nd and 326th. Furthermore, the state's largest cities and towns have relatively low levels of population density. Only six municipalities—Portland, South Portland, Old Orchard Beach, Waterville, Lewiston, and Bath—have densities greater than 1,000 people per square mile. And among all U.S. places with populations of at least 10,000, Portland—Maine's most dense city—ranks just 1,338th with just over 3,000 people per square mile.

From the open fields of Aroostook County to the great northern forest, western mountains, and remote Down East fishing villages, Maine ranks as the second most rural state in the nation.

A CLOSER LOOK:

MAINE'S POPULATION IS STEADILY CONGREGATING IN THE SOUTHERN HALF OF THE STATE, WHICH IS INCREASINGLY SUBURBANIZING

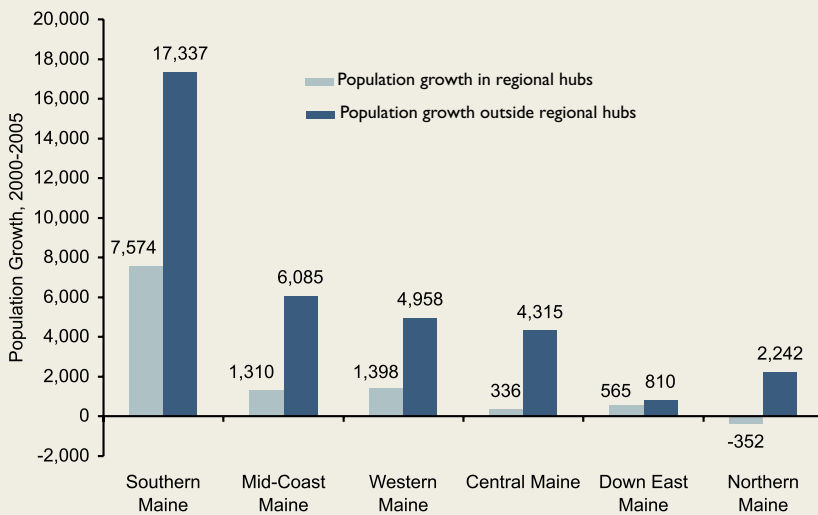


A closer look reveals that Maine is quite “suburban.” Over 65 percent of Maine’s population now lives within 10 metropolitan and so-called micropolitan areas. These regions, comprised of central counties containing an urbanized area of a certain size and counties that meet a commuting threshold into the urbanized area, now encompass the vast majority of Maine’s population. At the same time, the share of the state’s population residing in Maine’s truly rural counties of Oxford, Franklin, Somerset, Piscataquis, Aroostook, Washington, Hancock, and Waldo has slipped from nearly 35 percent in 1960 to 27 percent today.

“Suburban” Maine, in this respect, has been growing steadily. In 1960, only five towns, containing 121,000 people or 12.4 percent of the state’s population, lay within a metropolitan area. Today, more than 860,000 Mainers—over 65 percent of the state’s population—reside in the 164 towns that comprise Maine’s metropolitan and micropolitan areas. This corridor of more urban areas, anchored by cities of at least 50,000 people (or at least 10,000 people in micropolitan areas), now constitutes a nearly continuous swath of land running along I-95 from the southern reaches of York County

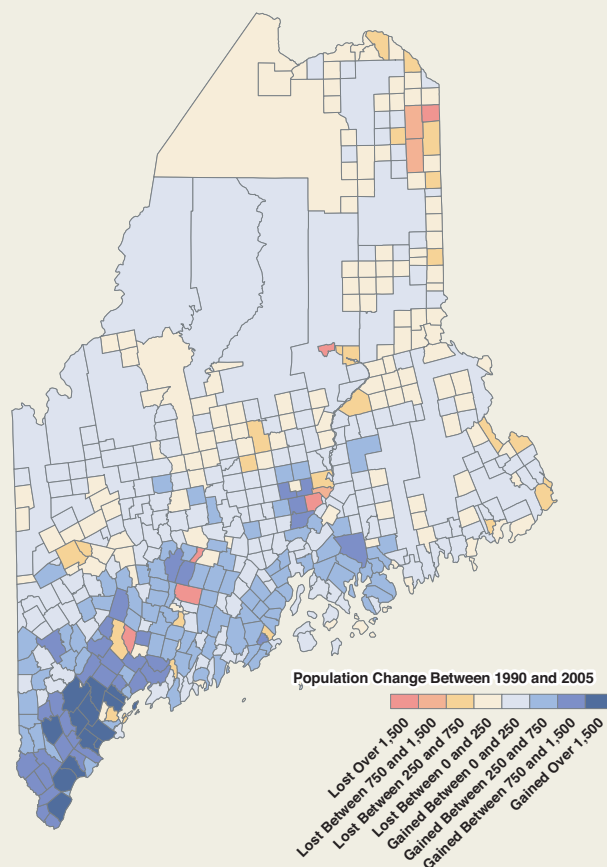
to the northern outskirts of Bangor. Altogether, this semi-urban zone now encompasses about 5,100 square miles, or 17 percent, of the state’s land mass, up from under one percent in 1960. Further, 75 percent of the state’s personal income is now generated in this metropolitan zone.⁵⁴

The bulk of Maine’s recent population growth is occurring outside the state’s traditional regional hubs



Source: Brookings analysis of U.S. Census Bureau data

Between 1990 and 2005, most regional hubs lost significant population while surrounding towns and rural areas recorded sizeable gains



Source: U.S. Census Bureau

Maine's more urban areas continue to grow faster than the rest of the state as population concentrates there. In the 1990s, the 164 towns that are part of metro or micro areas grew by 5.7-percent; the non-urban remainder of the state grew by just .6 percent. While the gap in growth has since narrowed, the more urban sections of the state are still adding people at a faster rate. They grew by 4.3-percent between 2000 and 2005 compared to the rural areas' 2.4-percent growth.

And yet, paradoxically, even as Mainers congregate along the I-95 corridor they are also spreading out. From 1970 to 2005, the share of Maine's population residing in the state's regional hubs—the 63 cities and towns that contain a majority of the state's jobs, commercial activity, and social services (see “About the Analysis”)—dropped from 55 percent to 43 percent. Moreover, the vast majority of the state's recent population growth

continues to take place in areas outside these core communities, with sparsely populated rural towns the most popular destination. Overall, towns not classified as regional hubs captured 77 percent of the state's post-2000 population growth of 47,000 new residents. Consequently, many small,

rural towns are now experiencing rapid growth. Durham near Brunswick, Turner outside of Lewiston-Auburn, North Berwick around York, and New Gloucester near Portland—all towns with populations under 5,000 in 2000—are adding at

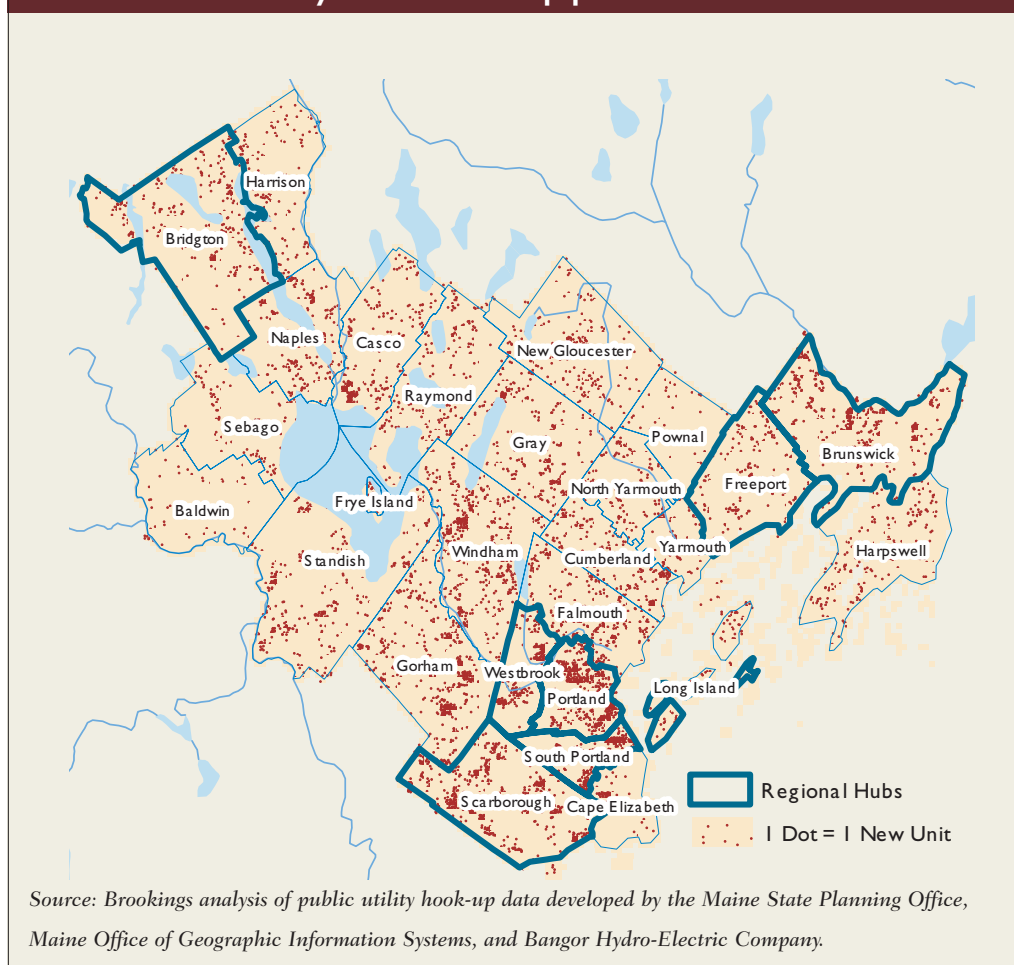
least 100 people per year. Minot, also outside of Lewiston-Auburn, recorded 26-percent growth since 2000, adding 117 people per year. And Waterboro, once home to only 4,500 people in 1990, now is home to over 7,200, recording average annual gains of more than 200 residents in recent years.

As new and old Mainers alike move farther out from traditional centers of population, land that was once rural is beginning to look anything but.

Decentralization, in this respect, is occurring in every region of the state. In Southern Maine, only 30 percent of the 2000 to 2005 population growth occurred within regional hubs. The breakdowns were even more striking in Mid-Coast, Western, and Central Maine: There, regional hubs absorbed only 18, 22, and 7 percent of new residents, respectively. Some regional hubs in Southern and Western Maine actually lost population, including Westbrook, Portland, and Rumford. And while Down East Maine's new growth has been relatively centralized, with 41 percent of it absorbed into the region's ten regional hubs, Northern Maine has been anything but: Between 2000 and 2005, regional hubs in Northern Maine lost 350 people despite gaining 1,900 in the entire region.

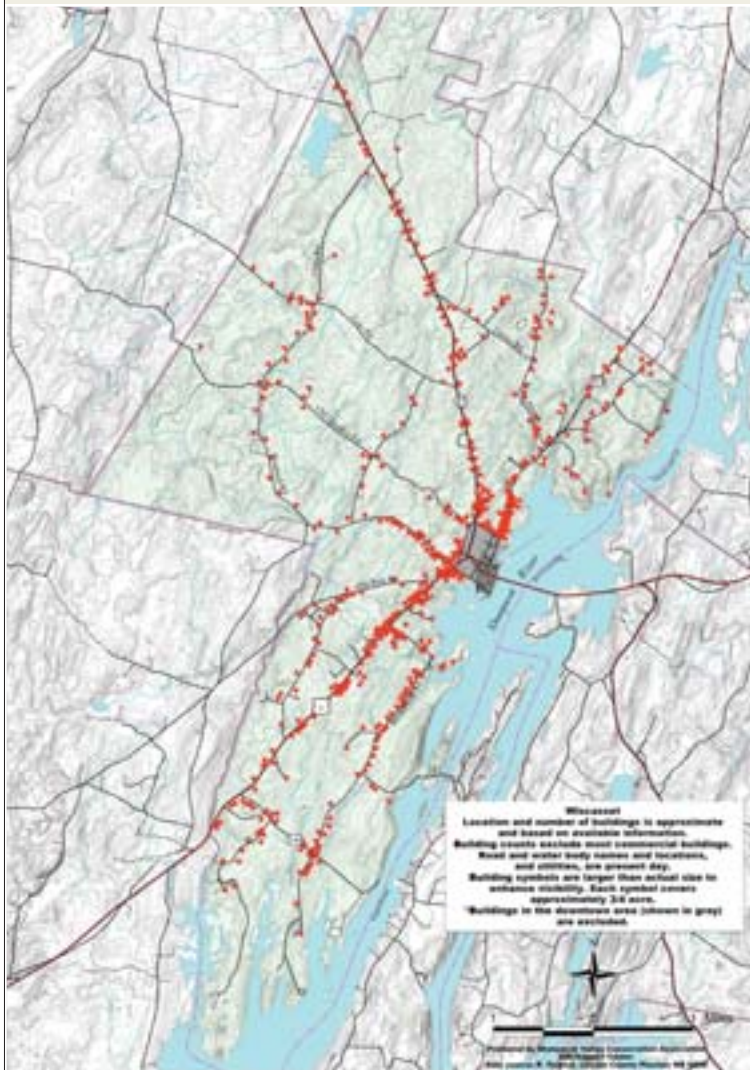
One result of these development patterns: Some regional hubs continue to lose population, while others grow only slowly. In the 1990s, for example, significant population losses in many regional hubs accompanied the growth of the periphery. To be specific, 38 of the 63 centers experienced declines, as these core towns lost more than 3 percent of their population, shedding almost 20,000 people in ten years. More recently, these important cities and towns have begun to grow again, though not all have. In fact, of the 38 regional centers that lost people in the 1990s, 19 have not yet rebounded. Calais, Lubec, Millinocket, Eastport, and Van Buren have all lost over 2 percent of their populations since 2000. Westbrook is now losing about 30 people annually. And the state's largest city of Portland is dropping at a rate of 70 people per year.

In Cumberland County, about 60 percent of all new housing units built since 2000 are located outside the county's seven traditional population centers

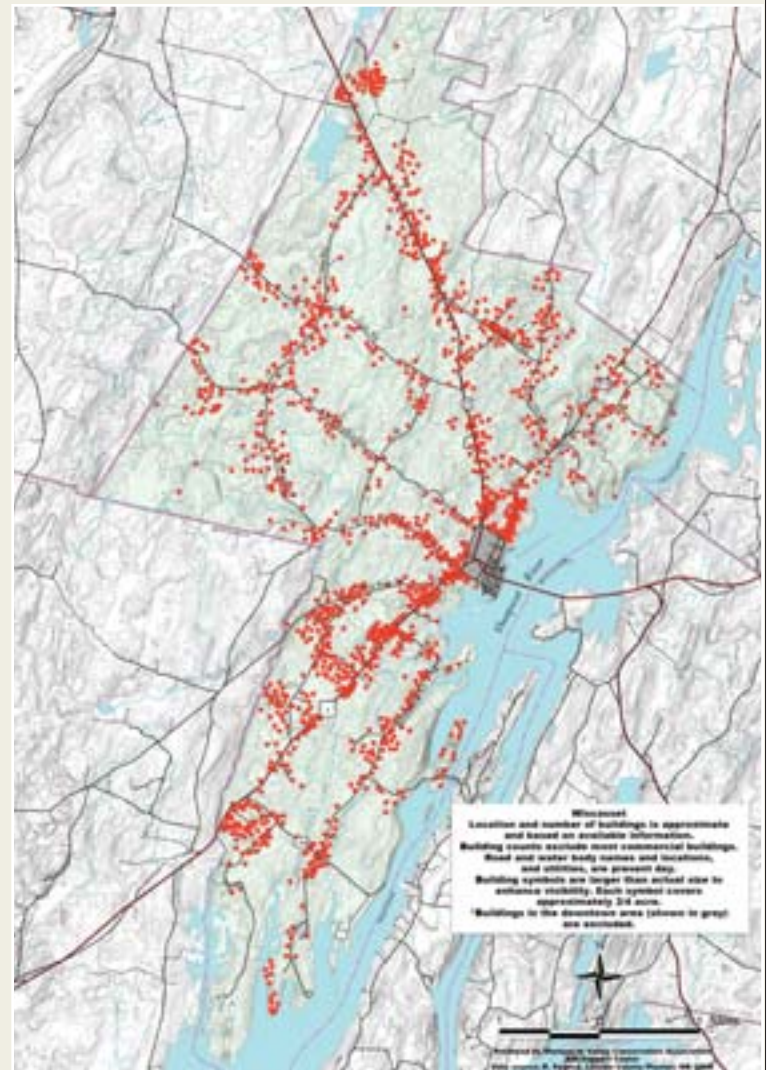


Once concentrated downtown and along a few major roads, residential development in Wiscasset dispersed throughout the village between 1970 and 2002

1970 (486 Buildings)



2002 (1,307 Buildings)



Source: Robert Faunie and the Sheepscot Valley Conservation Association GIS Support Center

Another more visible result: Population dispersal is sending an often chaotic diffusion of residential and retail development out across the Maine landscape. As new and old Mainers alike move farther out from traditional centers of population, land that was once rural is beginning to look anything but. In Cumberland County, for instance, almost 60 percent of the new housing units built since 2000 have gone into tracts located outside of the county's seven regional hubs. Likewise, 40 percent of the county's new commercial establishments have located along roads outside regional hubs, the state's long-time commercial and retail centers.⁵⁵

Numerous towns along Route 1 in the Mid-Coast region offer a case in point of this sort of diffused development. Along Route 1, most development between 1900 and 1970 took place near town centers and along existing, well-traveled corridors, principally Route 1 itself. More recently, however, newer growth has been spreading far out along secondary roads into areas increasingly distant from main street downtowns and town centers. In some cases, new development is occurring on tracts of previously road-less, undeveloped land. Take Searsport, for example, where until World War II residential buildings remained confined to the town's center and Route 1. By 1976, the number of residences in the town had nearly doubled from 448 to 843 as development moved further inland up Brock and Mount Ephraim roads. And in 2005, almost 1,400 residences dotted all parts of the town, including the entire shores of Swan Lake and Halfmoon Pond.⁵⁶ Similar decentralizing patterns can be found elsewhere along the corridor. Woolwich added over 1,000 new residential buildings from 1974 to 2005, hundreds of which are located in town-defined rural areas far-removed from downtown or Route 1.⁵⁷

In like fashion, Wiscasset has seen an almost three-fold increase in its residences—from 486 in 1970 to 1,307 in 2002. This construction has dispersed along all of the town's major and minor arterials and into subdivisions in every corner of the village.

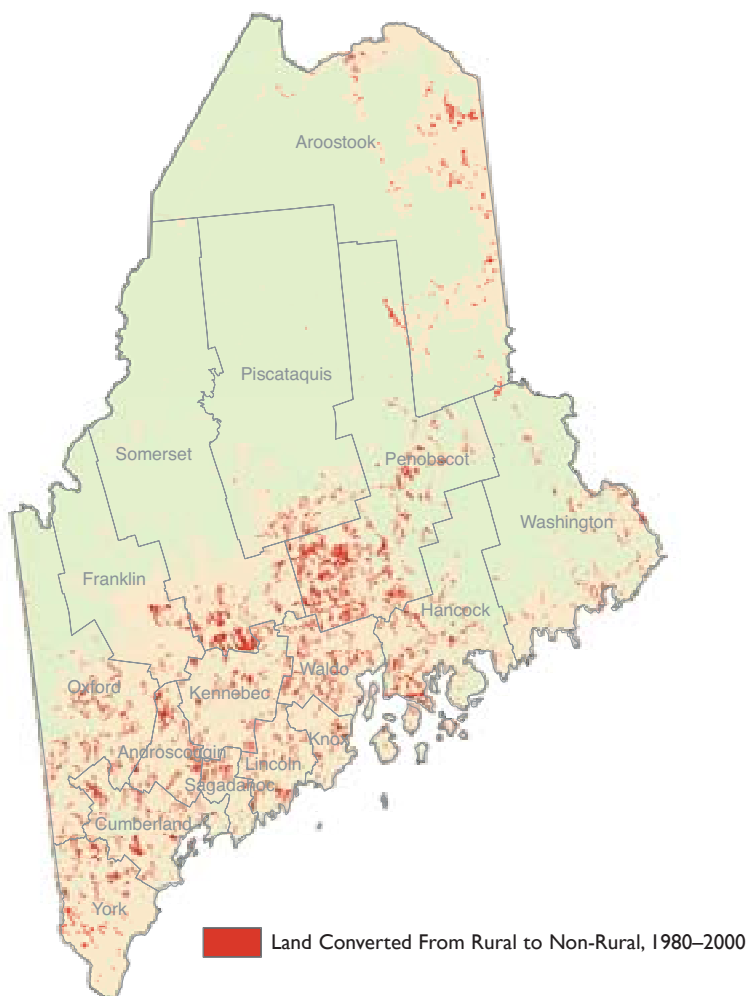


From 1980 to 2000, Mainers altered the character of 869,000 acres—or more than 1,300 square miles—of rural land.

Thanks to this dispersal of development Maine is rapidly converting rural fields and woodlots to other uses.

From 1980 to 2000, Mainers altered the character of 869,000 acres—or more than 1,300 square miles, of rural land⁵⁸—a territory roughly the size of Rhode Island.⁵⁹ This represented a loss of 17-percent of the state's developable rural land. More than 650,000 of these rural acres were lost in the 1990s alone, during which time the share of Maine's developable land in rural character fell from 61 to 52 percent. Only Virginia lost a greater share of its rural land than Maine in the 1990s.⁶⁰ The loss of rural land in the 1990s, moreover, coincided with the construction of only 65,000 new housing units in the ten-year period. That means Maine communities converted over ten acres of rural land to other uses for every one new housing unit built in the 1990s—good for the third most land-consuming home production rate in the nation, behind Vermont and West Virginia.

More than 869,000 acres of Maine's developable land shifted out of rural uses between 1980 and 2000



Source: Brookings analysis of housing density data from David Theobald, Colorado State University

case of the vast North, the absolute impact was nevertheless massive: During the 20-year period some 270,000 acres of northern rural territory—the largest absolute change in a region—moved from rural to other uses. Nearly 200,000 of these lost rural acres were located in the southern reaches of Penobscot County, where rapid rural conversion occurred along a large swath of land running from the Dover-Foxcroft area to greater Bangor. And while Western Maine experienced the smallest percentage loss of rural land at 14.2 percent, Androscoggin County experienced the most abrupt land-use change in the state: Some 40 percent of Androscoggin County's rural acres vanished from 1980 to 2000. How, meanwhile, did those towns in the Route 1 Corridor fare? Searsport and Woolwich, for their part, lost 36 and 26 percent of their rural land, while Wiscasset's rural loss of over 71-percent ranked 15th-worst in the state. Yet those towns were hardly the state's largest municipal losers of rural territory: Gorham, Orono, Brewer, Cumberland, and Westport among others all lost over 75 percent of their developable rural acreage.

The state's losses of rural land extend to all regions, though the impacts vary. Not surprisingly, the state's largest percentage losses of rural land have been taking place in the growing Southern and Mid-Coast regions. Southern Maine, for example, saw home construction and other development change the character of 100,000 of its rural acres between 1980 and 2000—some 30 percent of its total. Cumberland County alone lost over 56,000 rural acres—a 39-percent reduction. Not far behind this pace of development was the Mid-coast, which lost 23 percent of its rural between 1980 and 2000, with Sagadahoc County's rural acres falling 35 percent. Central Maine fared only somewhat better, losing over 110,000 rural acres for an 18-percent loss. For their part, slow-growing Northern and Down East Maine saw some of the lowest percentage losses of rural land in the state, but even so experienced significant land-use change. Between 1980 and 2000, these regions witnessed the fragmentation of some 14.8 and 16.6 percent of their rural tracts—relatively modest percentage losses. But at least in the

Even the Unorganized Territory has become vulnerable to changes in land use. While Maine's Unorganized Territory—home to only 8,000 permanent residents—remains almost entirely undeveloped due to geographic and legal constraints, recent changes in land ownership are increasing the chance of more residential development in parts of this 9.3 million acre expanse of largely forested rural land. The rising pressure stems from a move away from large amounts of land held by a small number of industrial foresters toward smaller parcels held by real estate investment trusts and other financial investors. Thus, 200 lots are now available for residential development in Somerset County's unorganized territory. And Plum Creek's proposal for a planned community envisions nearly 1,000 new lots over the next 15 years, predominantly on UT land in Somerset and Piscataquis counties.⁶¹

WHAT THIS MEANS:

Maine is simultaneously “urbanizing” and sprawling. Mainers resist the notion, but large swaths of their traditionally rural landscape are quite rapidly taking on a new, suburbanized tenor as a larger and larger share of the state’s population congregates along a wide swath either side of the I-95 corridor. No longer do most Mainers reside in as rural a state as they once did. At the same time, far from congregating in established centers, Mainers both native and “from away” are spreading far out across the land, building homes and strip malls along an ever-widening frontier of exurban and suburban encroachment, converting more and more once-rural land to other uses. Put these dynamics together and the results are paradoxical. Mainers are concentrating and dispersing at once, and as they do, the character of their state is changing.

And yet, the configuration of Maine’s growth—sprawling, sometimes chaotic, low-density suburbanization as opposed to more channeled, concentrated growth—could jeopardize the state’s ability to realize potential gains. Flows of people into recently rural towns may overwhelm the ability of volunteer planning officials to manage growth. Traffic and strip development may destroy the small-town ambiance. And for that matter, waves of ill-managed sprawling development could easily threaten the state’s much-beloved rural identity, which itself is a valuable economic asset. In sum, the spread of anonymous suburban development threatens to gradually (or not so gradually) degrade Maine’s quality of place at a time when quality of place means more and more. ■



Consequently, the state’s development patterns present both opportunities and challenges.

On the positive side, Maine’s growing population cluster in the south will likely promote increased economic vitality. Already the rise of a modest critical mass of consumers, workers, and businesses in the I-95 corridor has enlarged the state’s chief growth engine at a time when high-value economic activity is increasingly concentrated in the nation’s most populous metropolitan areas. Looking forward, further gains should result from Maine’s proximity to the Boston metropolis. That’s because the state provides an attractive option for young families, near-retirees, and retirees fleeing high-cost areas. So, too, may highly skilled professionals from Boston arrive, seeking more affordable and livable home bases from which to commute or telecommute. All of these groups could contribute rich flows of human, social, and financial capital to the state.

No longer do most Mainers reside in as rural a state as they once did.



III. EMERGING IMPLICATIONS OF MAINE'S TRENDS: OPPORTUNITIES AND CHALLENGES

Maine's recent growth and development trends present the state with opportunities.

In-migration—even to some struggling rural areas—may be replenishing the state's hard-working but aging workforce.

Population growth is restoring life to traditional regional hubs that have been down on their luck for decades.

Meanwhile, the continuing shift to a more diversified service-oriented economy means that the state now has a more balanced small-business economy that is beginning to gain a toehold in the knowledge-driven, innovation-oriented industries of tomorrow. Firm growth in these clusters holds out genuine hope—at least in time—of better-paying jobs and a more secure future for Maine workers and their families.

And yet, the average Mainer cannot but fret at much that is happening. Workers see good jobs being replaced with lower-paying ones and lack the skills to secure something better. Policymakers tout the promise of Maine's unfolding future economy but meanwhile the hoped-for future of plentiful, good-paying jobs seems slow to arrive. Simultaneously, unplanned,

haphazard suburban development appears in many places to be degrading Maine's special essence—its pristine coastline and forests and its authentic towns.

In this fashion, the following section reports on three decidedly mixed implications of the state's growth and development trends, and documents that:

- **Demographic change is raising education levels and accelerating population growth . . . But many workers remain unprepared for tomorrow's jobs**
- **Economic restructuring is producing quality jobs in emerging innovation clusters . . . But these clusters remain very small**
- **Development patterns are beginning to give some cities and towns new life . . . But suburbanization is consuming rural land, increasing government costs, and degrading the state's small towns and environment—its true “brand”**



The implications of Maine's current trends are decidedly mixed.



IMPLICATION:

MAINE'S POPULATION DYNAMICS ARE BRINGING NEW VITALITY, BUT SERIOUS WORKFORCE CHALLENGES REMAIN

Workforce stresses—along with some benefits—are the first implication of the way Maine is growing. In this respect, Maine's emerging demographic trends have the potential to ameliorate Maine's labor force situation.

For the first time in years domestic in-migration is replenishing the state's shrinking labor force. Likewise, increases in Maine's higher educational attainment are beginning to reverse a decades-long trend of underperformance on that critical determinant of personal and regional economic success.

And yet, for all that, Maine's demographic and economic reality will continue to confront the state with serious labor force challenges.

Most notably, the increasing skill requirements of many jobs, combined with the state's continued aging and relatively smaller cohorts of younger workers, threaten to constrain growth by limiting both the number of workers available in Maine and their overall skill levels.¹ In this sense, Maine's fundamental population and workforce dynamics could on balance constrain the ability of firms—and in some cases whole industries—from hiring enough qualified employees as smaller labor pools and relatively low skill and educational attainment levels permeate the state.

In this sense the implications for Maine are two-fold:



MAINE'S POPULATION DYNAMICS ARE BRINGING NEW VITALITY

Population change has its benefits:

The state's educational attainment, for one thing, is improving. For years, Maine's B.A. attainment rate seriously lagged New England and the nation. However, in recent years the education levels of Maine residents and workers have been rising. Today, 25.6 percent of Maine's population over age 25 possesses a B.A.² This achievement now ranks the state 25th in the nation, up from 44th in 1970 and 27th as recently as 2000. Moreover, enrollment in post-secondary education is also on the rise. Maine's revamped community college system, for instance, has experienced enrollment gains of 42 percent since 2002 and 139 percent since 1995.³

In addition, in-migration may be helping to reduce workforce shortages and skills deficits. Most notably, the thousands of former residents of the well-educated Boston metropolitan area now moving to Maine each year bring with them knowledge and skills that will enrich Maine's workforce. Even before the recent burst of migration, in fact, newcomers were elevating the state's educational attainment: Forty-one percent of those aged 25 to 34 who moved to Maine between 1995 and 2000 held bachelor's degrees compared to 19 percent of young resident Mainers. And survey research on Maine college graduates by David Silvernail of the University of Southern Maine shows that more former residents are returning to Maine to finish college or to work than most people think. In fact, according to Silvernail's work, 55 percent of Maine high school graduates who attend and graduate from colleges in other states choose to return to Maine to work.⁴

Older workers, moreover, represent an important asset to the workforce. In this respect, Maine's mature and aging labor force combined with inflows of older residents from outside Maine offers a host of benefits to the state's economy. Beyond the priceless knowledge and experiences that older workers bring to the office or shop floor, they can also serve as mentors for younger employees. Indeed, a recent study by the human resources consulting firm Towers Perrin found that workers 55 and older are more motivated to surpass job expectations than any other age group, making their retention and even recruitment that much more valuable.⁵

Newcomers were elevating the state's educational attainment even before the recent acceleration of migration.



AND YET, RECENT PROGRESS CANNOT ERASE SERIOUS LONG-TERM WORKFORCE CHALLENGES

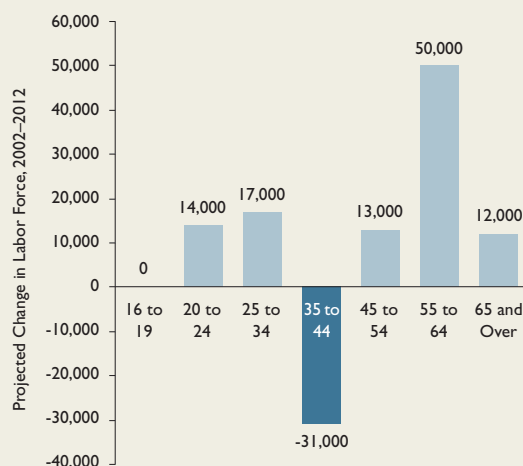
Maine's current and projected demographic profile, in this regard, poses serious problems as the state's employers contemplate how they will locate sufficient numbers of appropriately skilled workers.

Despite recent population growth, outright labor shortages point to long-term workforce supply problems.

Given its aging population and the out-migration of young adults, Maine labor markets are tight. In fact, continuing demand growth in many labor-intensive service industries is already producing labor shortages. Job vacancies statewide have increased to 4.2 percent of the labor force.⁶ Shortages are already acute in the health care field where registered nurses are in high demand, and promise to worsen in the years ahead. Manufacturing industries are also reporting hundreds of openings statewide for skilled trades like machinists.⁷ For its part, the construction industry in Southern Maine has spent nearly \$500,000 for TV ads intended to attract young people to construction trades.⁸



A decline in Maine's prime 35- to 44-year-old labor force is expected to further tax the state's tight labor market



Source: Maine Department of Labor

Jobs requiring higher education or special skills are expected to grow considerably by 2012

Education or Training Requirement	Projected Job Growth, 2002–2012
Doctoral Degree	28.0%
Associate Degree	23.9%
Master's Degree	23.6%
First Professional Degree	17.6%
Bachelor's Degree plus Work Experience	14.5%
Postsecondary Vocational Award	14.1%
Bachelor's Degree	12.7%
Work Experience in a Related Occupation	10.9%
Short-term on-the-job Training	10.5%
Long-term on-the-job Training	5.8%
Moderate-term on-the-job Training	3.8%

Source: Maine Department of Labor

Going forward, Maine's tight labor market will only become more so as the baby boomers begin to retire.

The problem is inevitable. As elsewhere, Maine's boomer generation (composed of those aged 41 to 60 in 2006) remains significantly larger than the generation following it, nicknamed "Gen X" and composed of residents aged 21 to 40 this year. To be specific, while 417,000 boomers live and work in Maine, just 331,000 Gen Xers do, meaning that almost 90,000 fewer potential workers populate the next generation. And it means that the generation that will supply the main pool of prime workers as the baby boom generation retires (starting in 2011) will be about 20 percent smaller than the current one. In short, the state will likely face extremely tight

labor markets for the foreseeable future at a time when the entire nation will be competing for a diminished supply of workers.⁹

Exacerbating the state's workforce crunch is Maine's historic lack of foreign-born residents. With non-Hispanic whites making up 96 percent of the state's population—the highest share in the country—and a foreign-born population of only three percent, Maine lacks the higher birth rates that come with greater diversity.¹⁰ As a result, the state must depend even more than most states on domestic in-migration to fill workforce holes, especially in the younger cohorts.

Continued job growth will further tax labor markets. On this front, the Maine Department of Labor (MDOL) forecasts that by 2012 employment in the state will have increased by about 10 percent during the preceding decade, reflecting the addition of 68,000 positions in the period.¹¹ That almost exactly tracks projected workforce growth, meaning Maine's labor markets will remain tight. However, it bears noting that the largest part of the projected labor force growth is expected to be among those aged 55 to 64.

MDOL expects the prime 35- to 44-year-old labor force to shrink.

Also challenging the workforce will be the shifting mix and composition of Maine industries' employment needs. With continued swift economic change assured, the shifting size and nature of Maine industries will further alter the mix of Maine's business sectors, and in turn occupational and labor force needs. In the next six years, after all, virtually all of the state's net growth in wage and salary jobs will take place in service-providing industries, while goods-producing employment will decline further. Along the way, the health care, retail trade, leisure and hospitality, professional and business services, and financial sectors will dominate job-cre-

ation and grow in relative size as aging and retirement gain sway and the consumption economy spreads.¹² According to MDOL, these changes portend a significant tilt in Maine's job mix toward managerial, professional, and technical work, as well as toward office, sales, and service occupations. These changes will require more Mainers to find work in new and different areas.

Implicit in these industrial and occupational shifts are rising demands for skilled labor. The bar is rising in part because the state's shifting job mix requires it. As the mix of jobs tilts further toward managerial, professional, and technical work, more workers need more education because those

occupations generally require some form of post-secondary education or training. For that reason, MDOL projects that the number of jobs in occupations requiring post-secondary education or training is expected to rise by 16 percent, while the number that doesn't will rise by 8 percent.¹³ Also contributing to the rising skills demand, as MDOL observes, is the rapid proliferation of computers and telecommunications technologies that demands all workers have the requisite knowledge and skills to use them.¹⁴ In addition, a wider array of skills and broader knowledge are required as more Mainers find themselves working in smaller establishments where they must master more skill sets, including self-management.

INDUSTRIAL RESTRUCTURING: JOB BY JOB, THE PATH ISN'T EASY

Nothing more epitomizes the challenges—human and economic—associated with Maine's ongoing industrial restructuring than the worker layoffs it has precipitated.

Since 1970, Maine has lost over 60,000 jobs in the manufacturing and natural resource sectors—more than one-third of the earlier total.¹⁵ Since 2000, more than 4,500 Maine workers a year have claimed unemployment benefits after mass lay-off events.¹⁶

No wonder so many Mainers voice deep misgivings about the direction and prospects of Maine's changing economy. For many workers the state's restructuring economy has been as much a source of anxiety as well as sustenance.

But beyond the human toll, layoffs and the reemployment challenge also highlight the substantial training and workforce management issues facing the state.

Most notably, the ongoing shift of the state's job mix away from manufacturing and natural resources positions and toward consumer and business services means that many workers will need to find new employment in completely different industries than employ them

now. What is more, the relatively low educational attainment of many workers—especially in rural Maine—greatly complicates their ability to secure employment in one of Maine's better-paying growth industries. Frequently, these growth industries require post-secondary education or other training. Consequently, many displaced and other Maine workers—absent further education—are and will be forced to settle for low-skill, low-pay retail or service jobs.

Which is the challenge for the state illuminated by two studies—one by the Maine Department of Labor and another by the Maine Center for Economic Policy—that have tracked laid-off manufacturing workers in central Maine.¹⁷

Both studies make clear the difficulty of finding new employment. Over one-third of those surveyed by MECEP and one-quarter of workers in the MDOL survey failed to find any new job whatsoever. In terms of pay, moreover, the 1999 MECEP study documented a 25-percent decline in median hourly wage of those workers who did find jobs while MDOL's research documented a modest 5-percent increase in average wages. However, what espe-

cially bears noting is the extent to which the fortunes of the displaced workers varied by education and age. The rougher time of the workers in the MECEP study, for example, likely owed to the fact that more than 70 percent of them had no more than a high school education. Still more suggestively, the MDOL study determined that displaced workers with a high school education or less took over twice as long to find new jobs than those with bachelor's degrees. For their part, workers over 55 took nearly a year to obtain employment while those under 45 needed a little more than six months.

Such contrasting experiences point to one of Maine's most significant economic challenges: Helping laid-off or vulnerable workers obtain the specific skills they need to move into better-paying, more secure jobs in growing, higher-value sectors and clusters. If the state and its businesses can respond to that challenge effectively, they will greatly smooth Maine's passage into the future. ■



Southern Maine, with its higher level of educational attainment, enjoys much higher wages and wage growth than the rest of the state

	B.A. Attainment Rate for Working-Age Population, 2000	Average Annual Wages, 2005	Annual Wage, Growth 2001–2005
Southern Maine	32.0%	\$35,843	3.5%
Rest of Maine	21.0%	\$30,626	3.0%

Source: Brookings analysis of U.S. Census Bureau data; Bureau of Labor Statistics

At the same time, Maine’s unique demographic and workforce characteristics complicate the work of upgrading worker skills and pay levels. Among those who are currently employed, a high proportion of workers at risk of layoff in restructuring manufacturing industries are middle-aged workers with relatively low levels of education. They may struggle to find high-wage employment opportunities without significant, focused retraining.¹⁸ This, in fact, represents one of the toughest long-term problems the state faces as its traditional base shrinks and it awaits the creation of larger numbers of good-paying jobs in emerging sectors.

More generally, the state’s relatively lower skill and education levels significantly depress wages. In Maine, as elsewhere, the more a worker has learned, the more he earns. For example, the average full-time worker in Maine with just a high school diploma earned \$25,417, according to Census 2000 data; by contrast, the average full time worker with a four-year college degree earned \$36,449.¹⁹ Unfortunately, however, that calculus does not broadly favor Maine pay levels. The bottom line: Maine has relatively more workers with lower levels of education, so many workers confront the reality of declining opportunities for high-wage work.

However, the influence of education on pay does not play out evenly across the state: Education levels vary by region, widening the gap between Southern Maine and the rest of the state. Southern Maine, with its enviable 32-percent B.A. attainment among the working-age population, has gained traction in the “knowledge” economy and made significant progress in its transition to a higher-pay economy based more on business services. Today, the region accounts for 47 percent of the state’s higher-wage professional and technical services, and contains a majority of the state’s employment in corporate headquarters, finance, and real estate. By contrast, the rest of the state—with its significantly lower 21-percent B.A. attainment and dwindling younger workforce—continues to struggle with economic transition. Most Maine counties remain significantly more specialized than Southern Maine in the shrinking goods-production super-sector, and much less specialized in growing and good-paying business-services sectors. Not surprisingly, Southern Maine enjoys average annual wages that are \$5,000 higher than the rest of the state and 18-percent faster annual wage growth between 2001 and 2005.²⁰

In short, continuing shortcomings in the size and skill levels of Maine’s workforce represent a serious challenge as the state seeks to enhance the quality of its economy and the livings it provides to Maine workers. Two sets of forces are converging. First, the impending retirement of the largest segment of Maine’s workforce, the baby boomers, challenges a historically slow-growing state to find adequate numbers of replacement workers. At the same time, the growing demand for skill in a wide variety of industries—from professional and business services to health care—is ratcheting up Maine employers’ demands for more highly skilled workers. Alleviating worker shortages and raising skill levels in the labor markets that serve Maine firms and clusters will be crucial errands in the years ahead—both in Southern Maine and the rest of the state.

IMPLICATION:

MAINE'S INNOVATION-ORIENTED INDUSTRY CLUSTERS ARE GROWING, BUT THEY REMAIN A SMALL PART OF THE STATE ECONOMY

A second key implication of Maine's current economic and development trajectory is the relative "thinness" of many of Maine's most important industry sectors and clusters. Granted, the state's innovation-oriented industry clusters and key export sectors provide reason for optimism in Maine, and remain the state's best hope for faster and better-paying job-creation in the future.

Technology and other expert sectors have added jobs in the past 10 years while jobs in professional and technical services—including engineering, architecture, and management consulting—are expected to increase significantly going into the next decade.

Despite these gains, however, many of Maine's most important industry sectors and clusters remain relatively small, populated by few companies, and sometimes loosely organized.

In sum, despite much ongoing achievement in growing an interesting collection of distinctive, innovative sectors and clusters, the state has much more work to do to ensure that these mostly very small networks of companies grow into significant producers of good-paying jobs in the future. So again the implications are mixed:

MAINE'S KEY EXPORT SECTORS AND EMERGING INDUSTRY CLUSTERS ARE MAKING PROGRESS

On the one hand, Maine's portfolio of traditional and new "export" clusters is doing reasonable well and holds out substantial promise for future job creation.

To begin with, Maine's traditional and emerging sectors and clusters have lost little ground since 2000, despite the major tech-industry downturn. In fact, Maine's more traditional top export industries—tourism, healthcare, non-store retailing, and finance and insurance—slightly outper-

formed their national counterparts between 2000 and 2004, as they posted a 2.5-percent annual rate of job growth compared to the national 2.0-percent figure for these industries. For their part, Maine technology clusters struggled in the wake of the 2000 technology crash, but so did their respective national industries. These clusters together shed 16,000 jobs in the last few years, as they together suffered 4.7-percent annual declines. Meanwhile, U.S. technology industries—which contracted at the rate of 4.1 percent a year—fared little better.²¹

For their part, some of the state's emerging innovation clusters are also generating jobs, albeit at a slower rate. Maine's biotechnology cluster—which out-performed the nation in the 1990s—continues to add jobs at a 0.6 percent annual rate, close behind the U.S. rate of 0.7 percent. Likewise, the state's important ship- and boat-building industry has rebounded since 2000, and has been adding nearly 300 jobs a year.²²

Moreover, many of Maine's critical clusters pay considerably more than the state average. Maine's growing biotechnology cluster, for example, pays almost \$47,000 a year—46 percent more than the state's average wage. The ship and boat-building cluster pays 60 percent more than average at \$51,000. And while the state's other technology clusters are for now shedding jobs—mirroring the national trend—wages in these areas are quite high: The average wage for all of Maine's technology clusters is \$41,800, almost \$10,000 more per year than the average for all jobs in the state.²³

Numerous potential cluster areas, moreover, hold promise for good-paying job growth in rural Maine. New outgrowths of the forest products industry represent an obvious source of economic potential in rural Maine, for example. In this regard, Maine Biodiesel, Maine Bioproducts, and Safe Handling Incorporated—all firms located in Western Maine—are each currently pursuing opportunities in biomass fractionation, refining, or conversion processes.

Maine's technology clusters offer high-paying jobs but make up a small share of the state's economy

	Employment, 1990	Employment, 2000	Employment, 2004	Average Annual Wage, 2004
Technology Clusters				
Advanced Materials	41,576	23,873	20,005	\$44,988
Agriculture/Marine Technology	9,666	10,461	9,821	\$28,255
Biotechnology	2,958	3,523	3,607	\$46,742
Forest Products	28,534	24,121	19,688	\$44,272
Information Technology	762	3,759	3,170	\$48,806
Precision Manufacturing	25,648	26,690	20,047	\$40,841
Total, Technology Clusters	109,144	92,427	76,338	\$41,803
Traditional Clusters				
Non-Store Retailers	4,680	8,591	9,042	\$27,302
Tourism	14,369	18,205	18,968	\$16,942
Health Care	57,723	83,853	95,945	\$32,825
Finance, Insurance	20,479	24,497	24,995	\$45,202
Total, Traditional Clusters	97,251	135,146	148,950	\$32,544
Total, All Clusters	206,395	227,573	225,288	\$35,681
Total, All Industries	520,576	581,259	592,994	\$31,913
<i>Source: Brookings analysis of data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages</i>				

Working to develop and coordinate the collective efforts of this growing cluster is the new Fractionation Development Center in Rumford. The burgeoning specialty food processing industry—exemplified by Mother's Mountain in Falmouth and York-based Stonewall Kitchen—is another promising outgrowth of past specialization in Maine. In like fashion, Maine's emergence as a growing source of organic or natural foods and cold-crop produce such as broccoli point toward a higher-value future for agriculture in the state. And some signs of life in Maine's aquaculture and marine science industries, particularly downeast in Franklin, offer hope in a state with natural ties to the water.

AND YET, MANY OF MAINE'S MOST PROMISING CLUSTERS REMAIN QUITE SMALL—WHICH LIMITS THEIR VITALITY AND IMPACT

In this respect, Maine's clusters—whether urban or rural, technologically oriented or traditional—unfortunately remain relatively small and in some cases lack vibrancy. Though bright spots exist, the state must contend with relatively small clusters, relatively slow growth in them, and sometimes-weak institutions and associations.

Most Maine clusters lack critical mass. More and more, economists underscore the importance to cluster-building and regional economic vitality of scale, “critical mass,” and “agglomeration”—factors that multiply the opportunities for labor force pooling, productive competition, shared learning, or the random interactions that lead to new ideas. However, most Maine industries and clusters remain quite small. The biotechnology and information technology clusters, for example, each employ just 3,000 or so people, and make up just 0.6 and 0.5 percent of all jobs in Maine, respectively. The advanced materials, forest products, and precision manufacturing clusters are larger, with 20,000 employees per cluster, but account in each case for just 3.3 percent of the state's jobs. For their part, the state's more traditional export sectors employ significant numbers of Mainers, but they are not huge either, and their collective heft owes mainly to Maine's 96,000 healthcare employees, who account for 16 percent of the state's employment. Meanwhile, finance and insurance supports 25,000 jobs for a 4.2 percent share, followed by tourism with 19,000 jobs (3.2 percent) and the 9,000 jobs (1.5 percent) supported by non-store retailers.²⁴

In fact, Maine's technology clusters have actually been getting smaller lately. Aside from the minimal job growth posted by biotechnology companies, all other Maine technology clusters gave up jobs between 2000 and 2004. Precision manufacturing fared the worst, shedding 6,600 jobs, followed by a loss of 4,400 jobs in the forest products cluster. The

agriculture and marine technology clusters, along with information technology, declined the least (aside from biotech), and lost only about 600 jobs.²⁵

Further constraining the state's economic progress is the "thinness" of Maine's small industries. In this respect, the limited size of Maine's sectors and clusters (and Maine itself) means that most lack significant scale in terms of the number of lead players, the depth of local labor markets, the strength of a local supplier base, or the presence of supporting institutions. For example, Maine's biotechnology cluster—composed mainly of one large firm (Idexx Laboratories) and a large research institution (Jackson Laboratories)—faces serious challenges in the national competition for qualified employees given the lack of alternative job opportunities nearby. Talented workers who move to Maine to start or continue careers in this field have limited options if they become dissatisfied with their jobs or wish to move on. This constraint not only contributes to difficulties in recruitment, but could limit investments by venture capitalists who perceive a difficulty in building top-quality management teams. In other areas, such as aquaculture and agriculture, industries characterized by numerous small-scale owner-entrepreneurs may lack the capacity for innovative new-product development and cohesive marketing efforts.²⁶

The state's relatively weak industry associations and firm-to-firm interactions further limit the vibrancy of Maine's clusters. Several clusters are held back by the lack of a strong or unifying industry association. Others lack rich and balanced exchanges between businesses, higher education, government, and investors. And beyond that, several of Maine's often-promising industrial clusters lack truly multi-dimensional partnerships to integrate work on such critically needed cluster-development agendas as market development, R&D, workforce development, and capitalization.

The absence of a major academic research establishment also limits possibilities. Maine's small size and economy have clearly impeded the growth of the state's important academic research enterprise. Academic institutions, in this respect, play a critical role in nurturing for industry clusters: They help develop relevant knowledge and provide a training ground for new workers. Advanced research institutions can also be the nexus of spinoff and startup activity, converting ideas into new businesses that extend and refine a state's cluster strengths. Unfortunately, despite significant recent

investments, Maine's remains a tiny university R&D effort. In 2004 Maine ranked 48th in the nation for the size of its academic research establishment, according to the National Science Foundation.²⁷ Additional indicators compiled by CFED for recent editions of its "Development Report Card of the States" confirm the impression. Yes, Maine's standing among the states on federal R&D investments had risen smartly in this decade, with University of Maine faculty faring well at generating research dollars and a system ranking quite high for new-firm spin-offs. Yet for all that, Maine's ranking on other indices of innovation capacity remains daunting: 50th on graduate students, 50th on university R&D activity, 45th on royalties and licenses granted, 42nd on patents produced.²⁸

At the firm level, Maine's lack of large businesses forecloses on other sorts of opportunities. Large firms confer special advantages. They can establish the national reputation of a place, serve as a training ground for generations of workers and managers, and give rise to the successive generations of spin-offs that can drive cluster growth. Unfortunately, Maine boasts few large firms. Preeminently a small business economy, Maine ranks 45th in the nation for the share of its employment provided by firms with more than 500 employees: Only about 10 percent of all employees work for such companies.²⁹

Maine's small size may also be depressing "deal flow"—the production of quality proposals for investment in company growth. To be sure, the modest size of Maine's capital markets may itself limit company and cluster growth by limiting the availability of funding. However, a closer analysis shows that the problem is as much an issue of supply as demand. Most notably, data from the 2004 *National Venture Capital Association Yearbook* reports that in 2003 Maine ranked 10th in venture capital funds raised in that year, with \$183 million raised, but that only \$13 million was actually deployed in three deals.³⁰ That suggests the problem was not so much a lack of funding for entrepreneurs and growth companies but a lack of businesses that met the requisite criteria of investors. In that sense, Maine's small size and "thin" clusters may be depressing its "deal flow"—the sheer number of potentially viable proposals on an ongoing basis—that attracts venture capital and produces significant job growth.³¹ Another key limitation is the shortage of experienced senior level executives that are essential to attracting outside capital.³²

IMPLICATION:

MAINE'S DEVELOPMENT PATTERNS ARE GIVING MANY PLACES NEW LIFE, BUT WIDESPREAD SUBURBANIZATION IS DRIVING UP COSTS AND THREATENING THE STATE'S "BRAND"

A final major consequence of the state's emerging development reality affects the built environment, both for good and ill.

On the positive side, Maine's new-found status as an attractive destination for migrants is stimulating new real estate demand and new investment throughout the state. Consequently, many towns are experiencing a revival after years of decline.

But while the populations of many traditional regional centers are beginning to grow again, the suburban towns and rural areas that surround them are growing even faster.

Such growth validates the attractiveness of these places, but the resulting reach and low-density tenor of suburbanization is exacting some large costs. Excessive school construction projects, redundant expenditures on service provision, and rising transportation costs—all driven by sprawl—are increasing the pressure on town coffers and family checkbooks. Moreover, the suburbanization of so much of Maine threatens to degrade the very qualities of the state's countryside and settlement areas that make them so appealing. Strip-development along once-scenic roads, development in Maine's forests and agricultural lands, and the threat of residential conversion of working waterfronts all endanger the value of Maine's distinct quality of place—a critical asset for future competitiveness.

These dynamics make current real estate development patterns an even more mixed bag than the dynamics of the state's workforce and industrial-clusters.

RECENT DEVELOPMENT PATTERNS ARE BEGINNING TO REVIVE MANY OF THE STATE'S MORE ESTABLISHED CITIES AND TOWNS

To be sure, recent growth has given a lift to many communities.

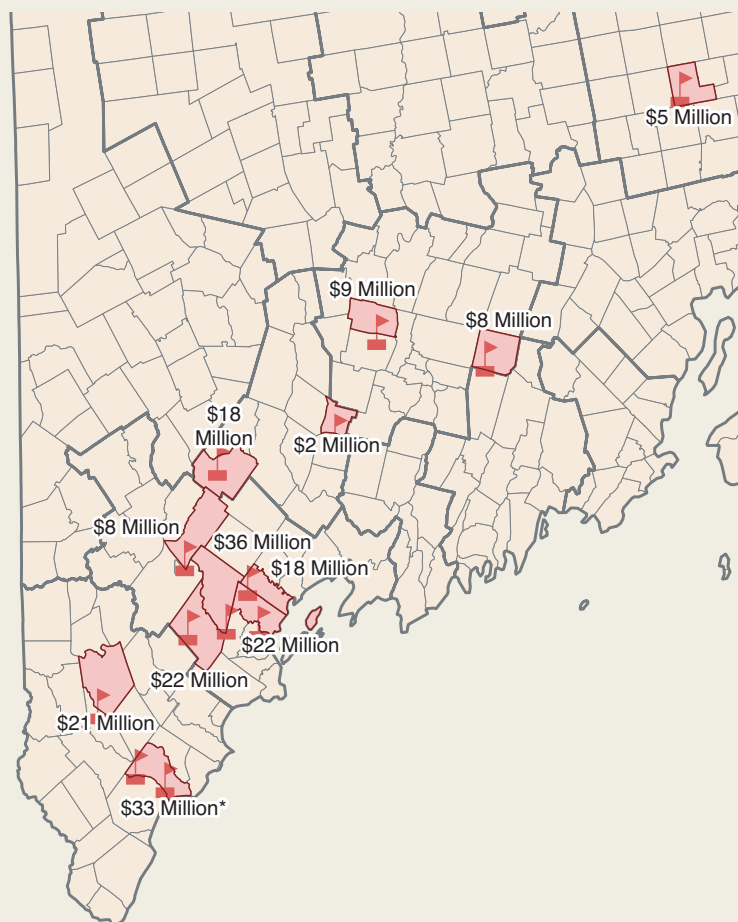
For the first time in years, for example, many of the state's traditional regional hubs are growing again. Part and parcel of the state's overall quickening growth, new population flows have stimulated many of these regional hubs which on the whole have turned large annual losses in the 1990s into larger annual gains since 2000. This trend is evident throughout the state. Rockland, Lewiston, Auburn, Boothbay Harbor, Farmington, Augusta, Brewer, and Dover-Foxcroft are all growing again despite losses in the 1990s. Other towns—like Bangor and Presque Isle—have stabilized after many years of decline. Statewide, these residential and commercial centers are now adding over 2,200 people each year—their fastest growth in over three decades—after losing an average of over 1,800 people per year in the 1990s.

Though Maine's student enrollment declined by 13,000 from 1995 to 2005, five million square feet of additional school capacity was built

	1995–2005
Student Enrollment	-13,000
Space in Schools	+ 5 million square feet

Source: Analysis conducted for Brookings by Michael Moore, Maine Public Spending Research Group

From 1995 to 2005, Maine spent \$200 million on 13 new schools in direct response to population dispersal in four of the state's largest labor market areas



Source: Analysis conducted for Brookings by Michael Moore, Maine Public Spending Research Group

*Two schools were built in Kennebunk at a cost of \$17 million and \$16 million

In addition, the increased populations in Maine's major cities and towns are giving at least some of these more "urban" locations greater economic and fiscal traction.

A growing concentration of people in and around some of the state's regional hubs is driving new vitality. For instance, taxable retail sales are up in many areas. The Lewiston-Auburn economic area took in nearly \$70 million more in 2005 than 2000 in inflation-adjusted retail sales—a 7.5-percent increase. The Brunswick area posted a similarly strong gain of 6-percent, a real increase of over \$35 million.³³

abundant research—whether focused locally or nationally, in places large or small, in counties urban or rural, in regions old or new—points to a common conclusion: More dispersed patterns of development frequently impose higher infrastructure and service costs on municipal governments and their taxpayers.³⁵

But increased fiscal costs and their impact on tax bills are not the only concern.

Costs to households are also putting the squeeze on Mainers. And beyond that, Maine's scattered development

AND YET, WIDESPREAD SUBURBANIZA- TION AND SPRAWL ARE DRIVING UP COSTS AND DAMAGING THE MAINE "BRAND"

Unfortunately, the benefits of Maine's recent new vitality are being offset to an extent by the increasing costs of sprawl.

Sprawl's fiscal costs were first illuminated by a 1997 report from the Maine State Planning Office (SPO) entitled "The Cost of Sprawl."³⁴ That study demonstrated the connection between sprawl and three primary cost drivers: the construction of redundant infrastructure to support dispersing populations; the similar expansion of service-provision areas and routes; and the maintenance of old, under-used service capacity.

These problems are not unique to Maine. The link between unbalanced population dynamics and increased fiscal costs has been well documented in the national literature as well in recent decades, with myriad studies showing the fiscal consequences of dispersed development. From the 1970s to today,

patterns are placing increased pressure on the state's iconic forests, picturesque landscapes, and down-to-earth towns—all vital components of the state's high quality of place, its true brand. In the long run, the slow degradation of Maine's vivid and distinctive quality of place (and the reputation it supports) may be the greatest cost to Maine of all.

Population dispersal, to begin with, is significantly increasing school construction costs. Though Maine's school population declined by 13,000 students during the last decade, new research conducted for Brookings by Michael Moore of the Maine Public Spending Research Group (MPSRG) suggests that the state's sprawling development patterns between 1995 and 2005 required the construction of more than one dozen new schools statewide at a cost of \$200 million. (To read Moore's full analysis, please visit www.brookings.edu/metro/maine.) To be sure, much of Maine's \$790 million in total K–12 capital spending during the 10 years underwrote not brand-new schools necessitated by sprawl but additions or renovations to existing ones. And yes, some new construction is unavoidable. Nevertheless, of the 42 new schools Maine built between 1995 and 2005, 13 costing \$200 million were constructed in direct response to

population dispersal in four of Maine's largest labor market areas (LMAs): Augusta, Bangor, Lewiston-Auburn, and Portland. In these regions, suburbanization drove enrollments up in outlying towns even as closer-in districts lost students. In response, school boards of the outlying rural and suburban towns used their authority to petition the state for capital spending—regardless of whether there was surplus capacity in neighboring districts. The result: Thirteen new schools, accounting for over one-quarter of the state's capital outlay, were built to serve these regions' decentralizing populations even though sufficient excess capacity already existed in each of the four regions to accommodate the K–12 population.

Who pays for these projects? As a rule of thumb, the state defrays 55 percent of the cost of Maine districts' capital projects, while local school districts pick up 45 percent of the tab. This varies with each district's "ability to pay," but on average over half of the costs—which are driven by local decisions and growth dynamics—are assumed by the state. The bottom line: Everyone pays for Maine's redundant school construction through their state income and sales taxes. For their part, residents in suburbanizing school districts located within sprawling regions pay twice—once through their property taxes (which fund the local component of the schools' costs) and again through their state taxes.

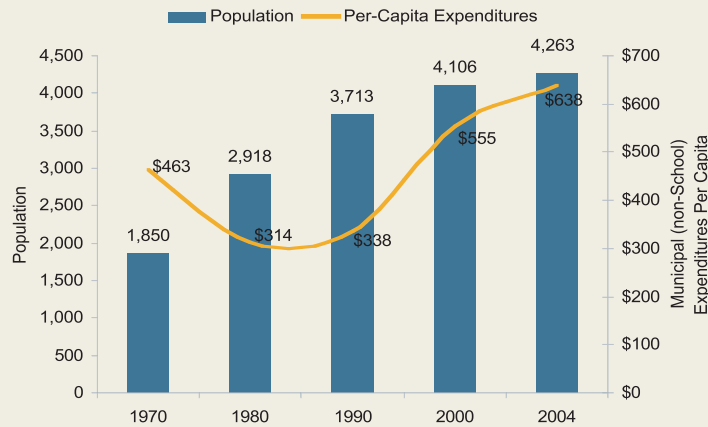
SCHOOL HOUSE COSTS: SCHOOL CONSTRUCTION IN THE AUGUSTA AREA

A closer look at the Augusta area illustrates why Maine spends a lot on school construction even though its school population is declining. In the Augusta region, 14 of the area's 19 school districts experienced enrollment declines as families left older cities and towns like Augusta itself and headed for newer suburbs. In this regard, the Augusta School Department recorded a 495-student loss while five rural districts added 266 pupils.³⁶ In response, two of the five districts that gained students—Maranacook (Readfield) and Windsor—constructed new buildings. The Windsor school district, which picked up 72 K–12 students from 1995 to 2005, built a \$7.9 million 340-student elementary school despite being

only a short distance east of excess capacity in the Augusta school district. Maranacook, which gained 56 K–12 pupils in the 10-year period, built a 400-student middle school for \$8.5 million. That's over \$16 million spent on new schools despite a total loss in the region of 1,500 students. Similar dynamics resulted in 11 other schools being built in the Portland, Lewiston-Auburn, and Bangor regions for a total of \$184 million. Together these schools increased those regions' school capacity by about 7,000 students even as overall enrollment declined. ■

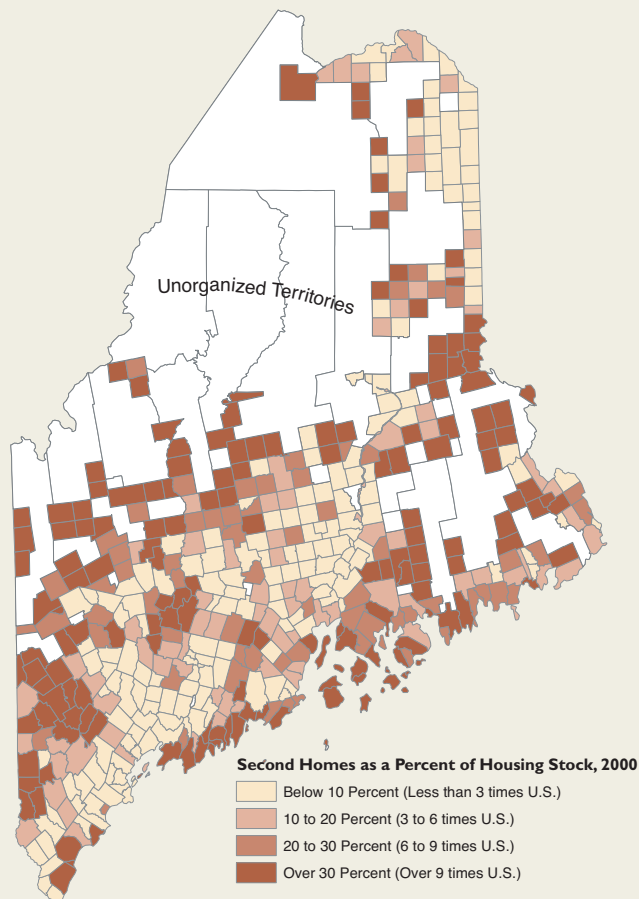
Rapid suburbanization also is driving up the cost of service provision in many towns. On this front, recent research by the New England Environmental Finance Center highlights the strain that growing populations are placing on formerly rural or slow-growing places once the newcomers demand a full slate of suburban-type services and new infrastructure.³⁷ While an increased tax base can actually lower per-capita expenditures early in towns' growth cycles, costs soon shoot up as populations surpass a "suburban" threshold of 2,500 to 6,000 people. At that point, many towns find that the service demands of their growing populations suddenly begin to outpace the capacity of their existing infrastructure and often volunteer staffs. What follows are rising costs, whether it be for a new fire engine or a new clerk. And the

Non-school municipal expenditures per capita in the town of China began rising once the town hit 3,000 people. As more people continue to move in, costs keep rising



Source: New England Environmental Finance Center

Maine's nation-leading second-homeownership rate exacerbates the housing affordability challenge in many areas of the state



Source: U.S. Census Bureau

impact can be dramatic. Per-capita, non-school related expenditures in the town of China, for instance, dropped from \$463 in 1970 to \$314 as the town grew from 1,850 people to about 3,000 in 1980. Once the 3,000 mark was passed, however, costs rapidly increased and now stand at \$638 per person for today's population of 4,300. In fact, from 1980 to 2004, total per-capita expenditures—including school-related costs—more than doubled: going from \$1,061 to \$2,143. Those who moved to the town in part to enjoy lower taxes were actually driving costs way up. What is more, this trend is poised to continue and spread throughout the state. Maine is now home to 139 municipalities with populations over 2,500 people, up from 109 in 1980. In many of them, taxes will soon spiral.

Mainers are also feeling the effects of development patterns in the form of declining home affordability, driven by increased demand. Recent house price appreciation in many coastal towns and some inland areas has added to the pressure on family budgets. Since 2000, rents have risen 30 percent and house prices have climbed 53 percent with even larger increases in coastal and southern Maine. Such dramatic increases far outpace the 10-percent growth of the state's median income over that period, meaning that two-fifths of all renters now face unaffordable housing cost burdens and nearly two-thirds of homeowners are unable to afford the median house price.³⁸ Accordingly, the state's housing affordability index has declined at a rate double the national average between 2000 and 2004.³⁹

While tepid income growth is one component of Maine's housing challenge, the major culprit is a severe

shortage in the affordable stock. The state added only half as many housing units as jobs during the 1990s, and the stock of multifamily housing barely increased due to losses to fire or demolition.⁴⁰ In some labor market areas, rental vacancy rates have fallen as low as one to two percent.⁴¹ And the Maine State Housing Authority estimated in 2004 that Maine would need over 22,000 new units of affordable rental housing in order to accommodate all of the state's low-income renter families.⁴² Rising prices and a limited affordable housing stock leaves many Maine families with only two options: get by with less disposable income by paying more in rent or mortgage costs or move farther away and contribute to the many costs of sprawl.

Contributing to the housing affordability crunch is Maine's high and rising rate of second-home ownership. Overall, nearly 16 percent of all dwellings in Maine—the highest share in the nation—are now designated as second homes.⁴³ In some parts of the state, this share—which rose by nearly a full point in the 1990s—runs even higher. For example, second homes make up more than 20 percent of all the dwellings in almost all of Mid-Coast Maine's coastal towns, and account for 30 percent of the housing stock—nine times the U.S. average—all along a continuous swath of

10 coastal towns from Phippsburg to Friendship. But in any event, rising demand for second homes in areas like the Mid-Coast region is likely complicating some Mainers' efforts to buy or hold onto a first home. Granted, high rates of second-home ownership—70 percent attributable to out-of-staters—bolster the local property tax base without adding to school costs.⁴⁴ But for many households the added demand for real estate in close-in, traditional locations may mostly have the effect of bidding up home prices and sending families further out in their search for affordable housing.

Travel time and transportation costs are also rising due to decentralizing development throughout the state.

Maine's average commute time jumped about 20 percent: from 19 to nearly 23 minutes in the 1990s—the 11th-highest absolute gain in the nation and the second-highest gain in New England, behind only Massachusetts. In terms of distance, the number of miles traveled in Maine continues to rise significantly faster than population growth. To be specific, between 1996 and 2004 the number of vehicle-miles traveled in Maine rose from about 10,300 to 11,400 miles per capita, a 10-percent jump that exceeded the national increase of 7.9 percent.⁴⁶ This rapid increase is hitting families hard at the pump. Using the American Automobile

Association's 2006 driving costs formula, Maine households are now paying about \$1,100 a year more in real terms than they were 10 years ago, a reality that will only get worse as gas prices rise and development trends continue to place people farther away from jobs, places of commerce, and each other.⁴⁷

DRIVEN OUTWARDS: HOME-PRICE APPRECIATION TURNS THE SPRAWL DIAL

Home affordability pressures in Maine—in addition to straining family budgets—have become a major impetus to sprawl.

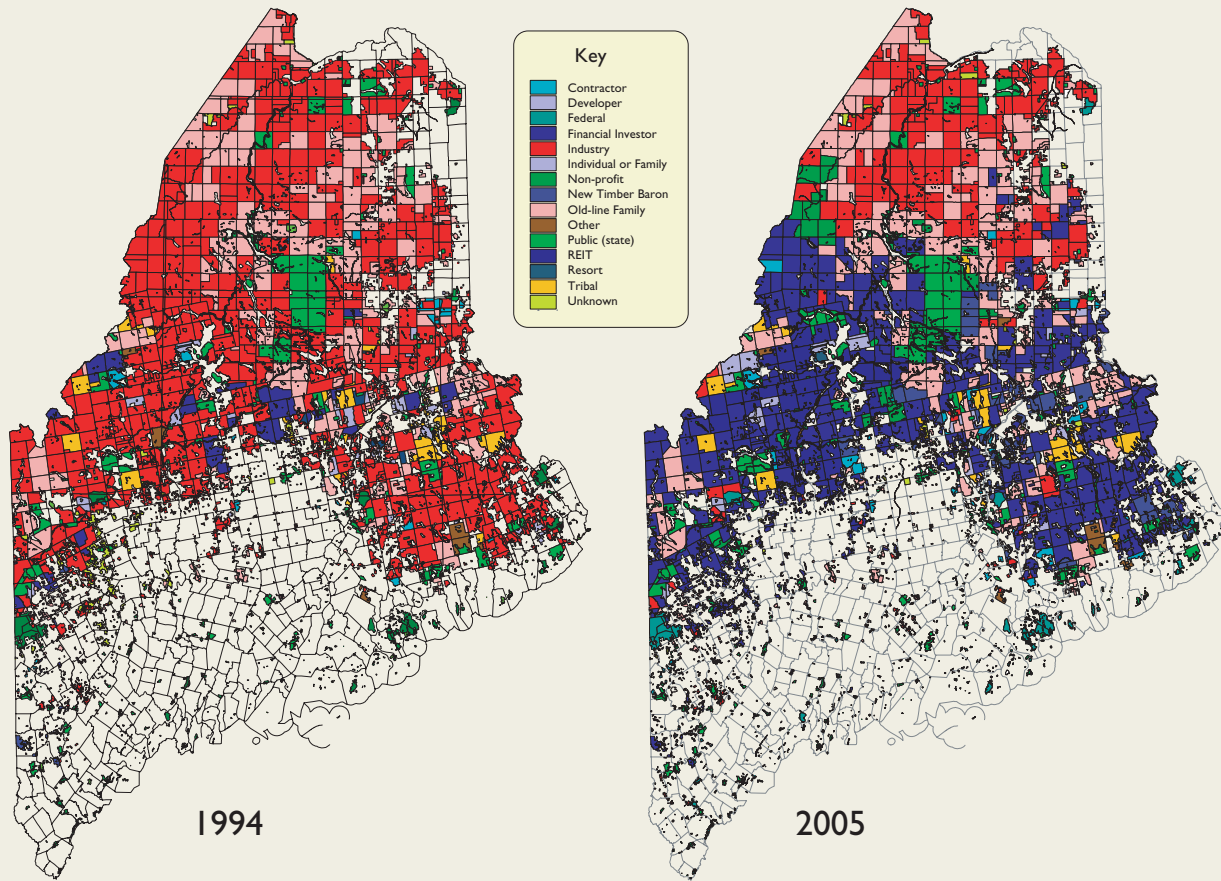
Most dramatically, the widening price differentials between super high-cost coastal locations and more moderately priced inland locales are sending moderate-income homebuyers on increasingly far-flung searches for affordable homes, triggering a massive regional sprawl dynamic.

For instance, a family that makes the median state income and that wants to live in Portland would have had little trouble finding an affordable house there in the year 2000,

when median prices were well under 3.5 times the state's median household income.⁴⁵ In 2005, however, that same family needed to drive 40 miles west to Hiram, 39 miles north to Lewiston, or 41 miles northeast to Sabattus in order to find affordably priced housing. The result: Rising house prices, fueled by unbalanced growth within the state and immigration from outside, motivate increasingly decentralized development as more and more families disperse throughout Maine. ■

But Maine also confronts another suite of growth-related problems, because its development patterns are threatening key aspects of its “brand”—one of the strongest in the country. Maine is famous for lobsters and Yankee ingenuity and its work ethic, for craftsmanship and skepticism. But it's also world-renowned for something else: its distinctive towns and villages and the stunning natural areas that lie between them. These compose Maine's “brand,” its true calling card.

The share of Maine's forestland owned by financial investors increased from 3.2 to 32.6 percent between 1994 and 2005



Source: John M. Hagan, Lloyd C. Irland, and Andrew A. Whitman. "Changing Timberland Ownership in the Northern Forest and Implications for Biodiversity" (Brunswick: Manomet Center for Conservation Sciences, 2005); James Sewall Company

But talk about Maine's "brand" is not just fancy language. As the mobility of Americans continues to increase, states more and more need a brand—a distinct, captivating appeal that at once establishes a unifying self-image and a competitive promise as they vie for their share of scarce visitors, talent, and income.⁴⁸

Longwoods International, an image branding company focused on tourism, reiterates this necessity, but also highlights a crucial principle: "A brand is not a campaign theme, tag line, or slogan. Instead, it is an expression of a compellingly unique experience."⁴⁹ Nor is that expression solely an aesthetic appeal. A quality brand can bring powerful practical benefits to a place. David McGranahan of the United States Department of Agriculture's Economic Research Service, for example, has found that rural counties high in natural amenities had higher population and income growth than those low in such amenities.⁵⁰ And in urban locales, work by Richard Florida, as well as Clark and others, points to a close connec-

tion between high quality of life, amenities, and population growth.⁵¹ All of which makes it a major problem for Maine that the way the state is growing is slowly degrading key elements of Maine's vivid and unifying sense of place.

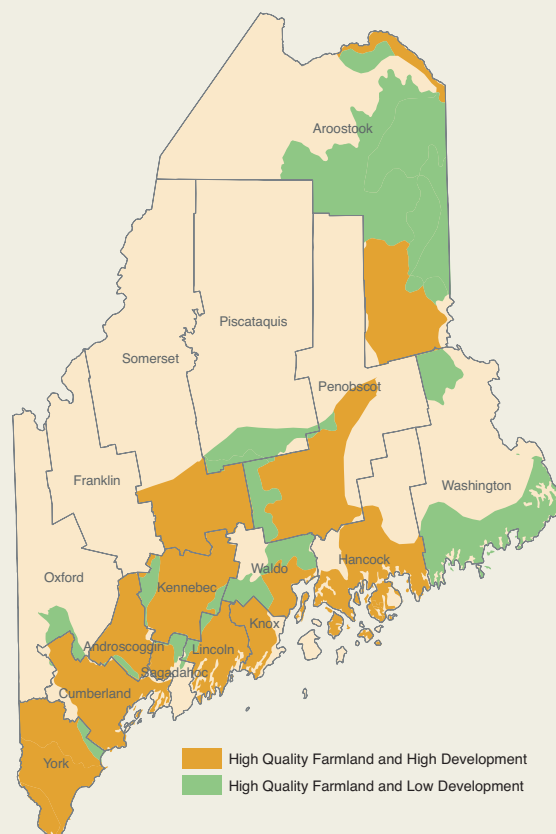
Continued rural development and ownership change, in this respect, threatens Maine's famous forests. Huge and almost mythical, the Northern Forest remains a critical element of the state's brand, not to mention the base of \$6.2 billion in economic activity generated by industries ranging from pulp and paper to forest bioproducts.⁵² However, a national USDA Forest Service report on private forests finds that current development patterns place over 700,000 acres of private forestland in the southern quadrant of Maine and in the lower Penobscot River valley under serious threat of increased housing density over the next 25 years, far exceeding threats faced by all other eastern states.⁵³ An added concern is rapid change in private forestland ownership: From

1994 to 2005, the share owned by timber companies—historically excellent land stewards—dropped from 59.2 to 15.5 percent while the share of forestland owned by financial investors rose from 3.2 to 32.6 percent.⁵⁴ Such change raises the prospect—highlighted by the Plum Creek Timber Company’s proposals for developing some of its timberlands around Moosehead Lake—of more Maine forestland being managed for shorter-term real estate or other consumptive uses.

At the same time, suburbanization is encroaching on agricultural land even more rapidly.

Currently, the state’s 1 million acres of farm country support a significant \$1.2 billion agricultural industry, as well as provide critical open space to a growing state.⁵⁵ This, too, is part of the Maine mystique. However, that mystique is being overrun. Recently, the American Farmland Trust reported that the pace of Maine’s losses of prime farmland—that is, the conversion of prime farmland to developed uses—jumped from slightly over 1,300 acres annually between 1987 and 1992 to 3,900 acres per year in the following five-year period. That near tripling of the state’s rate of farmland loss represented the fourth-fastest increase in the nation.⁵⁶ Moreover, the current acceleration of development in Maine is likely to increase the state’s farmland losses. With the exceptions of fields in northern Aroostook County and the southern quarter of Washington County, the vast majority of the state’s top-quality farm property lies within or adjacent to the state’s fastest-growing urban and suburban areas.⁵⁷ That means that as the pace of development accelerates so will the loss of farmland. Already, in fact, land prices measure the pressure, with the demand for new rural housing increasing per-acre farmland values to \$1,850 (farm income per-acre remains stuck at just \$81).⁵⁸ With further encroachment of suburban-style development, a signature Maine industry and land-use will lose some of its vivid presence.

Rapid suburbanization is encroaching on much of the state’s high-quality agricultural land



Source: American Farmland Trust

Strong demand for residential development also endangers the stability of Maine’s working waterfronts.

These commercial areas matter to Maine’s future not only because they pump at least \$350 million into the Maine economy every year.⁵⁹ Equally important, they contribute incalculably to the distinctiveness of Maine’s brand and ambiance, as they embody a palpable link to Maine’s past, and to the heritage of the coast. And yet, these colorful docklands and harbor zones are under even greater pressure than Maine farms to slide into residential use as the demand for second homes and coastal living in general increases.⁶⁰ This is the case in Cundy’s Harbor, a village of the town of Harpswell, where coastal per-acre land values are between three and 3.5 times higher than interior land values. Property tax burdens are increasing much faster than the income generated from marine-related activities, thus raising the pressure to sell to those interested in converting the waterfront land to residential uses.⁶¹ Beyond the obvious losses of coastal access and

marine industry revenue that ownership transfer threatens to bring, Cundy's Harbor residents are also concerned about the loss of community character, arguing that changes along the coast will create a hodgepodge of buildings and architectural styles that degrade the distinctive aesthetics of the village.⁶² The concerns expressed in Cundy's Harbor stretch the entire coast. From 2000 to 2004, land values jumped an average of 58 percent in 25 coastal towns surveyed by Coastal Enterprises, Inc. Nine of the 25 towns anticipate negative changes to their working waterfronts in coming years.⁶³



Why do so many visitors seek to spend so much time and money in Maine? Why do so many visitors return for good? According to survey results, the 13 highest-rated Maine attributes all revolved around its abundance of scenic vistas, the high quality of its recreational opportunities, and its charming small towns.⁶⁷ And yet, the way Maine is grow-

ing—and the poor management of the demand that Maine's attractions prompts—also threatens to degrade exactly the quality of place that prompted the demand in the first place. Congestion and scattershot development are spoiling vacation and retirement destinations. Sprawl is impinging on the countryside. And too many of Maine's most vivid towns have been surrounded by bland mass-produced development. None of that bodes well for industries that depend utterly on Maine's fame as a distinctive place defined by what former-Gov. Angus King once called the idyllic contrast between village and countryside, "crisp as a fresh apple, picked on a fine fall day." ■

Another problem, meanwhile, is the defacement of Maine's scenic corridors. Winding, country roads, tranquil rural byways, and scenic drives are another signature element of Maine life. And yet, that too is going. For example, those driving today along Routes 302 and 4 to the west or Routes 1 and 3 near the coast are now greeted in many locations—not with "life as it should be"—but with the chaotic strip development common to suburbanized areas anywhere in America. What's more, Maine's special places are in some cases being "loved to death" as the ill-managed machinery of tourism—motels, RV campgrounds, parking lots, golf courses, and vacation homes—invades the environs and near-rural landscapes of popular towns.⁶⁴ This combination of scattered development and corridor congestion is slowly degrading another irreplaceable aspect of Maine's brand.

The 13 highest-rated Maine attributes in a recent survey of visitors all revolve around its abundance of scenic vistas, the high quality of its recreational opportunities, and its charming small towns.

Nor may current growth patterns favor Maine's huge tourism industry and potential as a leading retirement destination. In 2004, over 43 million day and overnight trips were taken in the state, providing a massive economic stimulus to Maine.⁶⁵ It is estimated that tourism generates \$2.5 billion—about seven percent of gross state product—and sustains nearly 70,000 jobs along with \$340 million per year in state revenues.⁶⁶ Likewise, as the number of people age 65 and over continues to increase throughout the state and the entire northeast, many will choose to retire in Maine.

IV. WORKING TOWARD CHANGE:

PAST STATE EFFORTS AND REMAINING CHALLENGES

How Maine is growing depends on a lot of factors. What happens in Millinocket, Scarborough, or Bar Harbor, for example, owes heavily to broad national and global market currents.

Trends in global commodity markets, the state of the Boston economy, the coming boom in retirement, many Americans' preference for low-density suburban living: All of these will influence how Maine grows.

But state policy also matters. Over the long haul, state governments can and do make a huge difference in how states develop.

State governments are major investors in education, advanced research, and innovation. States play a role in conservation. And for that matter legislatures and governors set the basic outlines of state and local governance, the tax system, the regulation of development.

For this reason, it bodes well that Maine possesses a strong tradition of innovative state policy initiatives that includes, among many other successes: the first billboard law in the nation; Land for Maine's Future (LMF), which has protected over 192,000 acres of land since 1987 through a series of land bonds; the Maine Learning Technology Initiative (the "laptops" initiative); and the state's new school funding for-

mula, Essential Programs and Services (EPS), a unique, research-driven model for guaranteeing universal quality public education for all children while controlling costs.

And yet, in at least three areas, Maine's past and present policy choices bear closer scrutiny. In each case, shortcomings in key state policy areas—built up over many years—must be counted either indifferent or negative influences on the state's growth and development pathway. Among the problems are:

- **An inconsistent economic development stance**
- **Often high costs of government and the unbalanced state-local tax system that supports them**
- **Building and planning rules that shunt development away from regional hubs and contribute to sprawl**

This chapter takes up each of these issues, and explores how flawed state policies may well be hindering the state's progress toward sustainable prosperity.



**State policy matters.
Over the long haul, state
governments can and do
make a huge difference in
how states develop.**



CHALLENGE

AN INCONSISTENT ECONOMIC-DEVELOPMENT STANCE OVER MANY YEARS HAS WEAKENED THE STATE'S EFFORTS TO IMPROVE ITS ECONOMY

One influence on how Maine is growing has been the inconsistency of its state-level economic development efforts, going back decades.

Over the short run, it's true, state governments have very little ability to shape the direction of regional economies.

Over time, however, state-level economic development efforts—when executed with vision and discipline—can meaningfully enhance economies, most notably when they support basic research, provide the infrastructure and amenities critical to retaining and attracting people and businesses; and foster the connections that can link firms, workers, and customers within industry clusters and outwards to markets.

Unfortunately, though, the evidence in Maine's case suggests that over several decades and numerous administrations the state's efforts to bolster its economy, while at times innovative, have not always been effective, in part because those efforts have not been steady enough or strong enough.

To be sure, Maine has had no shortage of thoughtful leaders and bold ideas on economic development over the years. However, Maine has frequently failed to stick to and sustain its innovation, with the predictable result that it has undercut the effectiveness of numerous intelligent but under- or un-funded initiatives that might have otherwise made a larger difference.

Nor is this merely an impression of the state's labors, gleaned from a few random conversations around the state. Instead, this portrayal of the state's well-intentioned but inconsistent economic development efforts is the main finding of a new critical review of Maine's development policies over the past 30 years conducted at Brookings' request by Laurie Lachance, a former state economist and current president and CEO of the Maine Development Foundation. (To read the full review please visit www.brookings.edu/metro/maine.)



Based on a variety of inquiries, Lachance's review began with a formal assessment of the state's main official economic development reports, strategy documents, and inaugural addresses. In addition, Lachance solicited insights through interviews of five of Maine's living governors; interviews with key economic development officials and experts; and an e-mail survey of over 500 Maine business, non-profit, government, and education leaders. Lachance's main conclusion: Maine's efforts to enhance its economic position over the years might have had greater impact if the state's frequent good ideas, ranging across many administrations, were more often supported with adequate sustained funding and better-focused follow-through.

Lachance makes four broad points:

1 Maine has had no shortage of solid leaders and bold ideas. Whatever the shortcomings of Maine's efforts to improve its economy, argues Lachance, they haven't owed to a lack of good ideas. Virtually every governor over the last 30 years, working with the Maine Legislature, has made important, well-intentioned contributions to Maine's economic betterment.¹

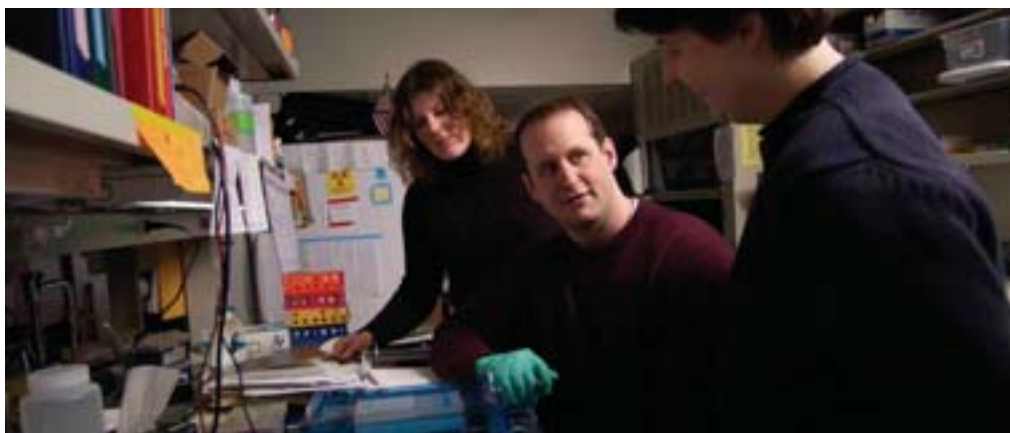
Through it all, and along the way, a series of progressive, quite innovative ideas have been developed—and sometimes even adhered to over time.

The transformation over the past 30 years of the Vocational Technical Institutes to the Technical College System to the Community College System represents a prime example of sustained economic development success.

So is the Maine Learning Technology Initiative (the "laptops" initiative), which made Maine a national and world leader in the use of technology in the classroom when it pledged to provide every 7th and 8th grader in the state with his or her own laptop computer.

And for its part, the Maine Technology Institute (MTI) has gained a fine national reputation since its inception in 1999 as a state-funded, non-profit model for providing early-stage

“patient” capital to support the commercialization of technology ideas. To date, MTI has invested \$27 million in 656 technology development projects across the state, while leveraging \$43.6 million from other sources. Equally impressive have been the efforts of the Baldacci administration to maintain a clear focus on key sectors and clusters across the economy and to focus the state’s development efforts accordingly.



So, from its early billboard law to its laptops project to the provision of state-financed venture money, Maine has a talent for out-of-the-box thinking and shrewdness about economic development. Frequently, in short, the state’s “heart” has been in the right place over the years as it has sought often to adhere to a plausible economic vision of environmental stewardship combined with strategic research investments in those industrial sectors in which the state has a competitive advantage, whether it be the forest-products industry, radio frequency identification, or the financial services business.²

However, Maine has often failed to adequately sustain its development ideas, which has undercut the effectiveness of a proliferation of under- or un-funded initiatives. Maine has an unfortunate penchant for launching development initiatives that it then fails to sustain.

The most prominent case in point is the state’s university system, where University of Maine faculty salaries rank 44th in the nation, and state appropriations per full-time student have dropped 37 percent, adjusted for inflation, since 1989.³

But looking beyond such longer-term, higher-cost investment needs, Maine maintains dozens of smaller development enterprises on the books whose returns are limited by minimal, sporadic, reduced, or non-existent funding.

A case in point is the state’s formal economic development infrastructure itself, which consists of an array of small, scantily funded entities that are hobbled by their minimal size or erratic funding levels. Few would suggest that the raw size or budgetary might of a state’s economic development organizations determines their efficacy, but in Maine’s case a number of state or quasi-public institutions created by the state remain surprisingly small or vulnerable. A few examples:

- The Department of Economic and Community Development (DECD), the state’s main economic development agency, remains the smallest department in state government, notwithstanding decades of hand-wringing about the state’s economy. In fact, of the state’s 15,600

employees, just 42 work on economic development at DECD. And in terms of its total per capita economic development spending, the state ranked 38th among the states, behind all the New England states except Rhode Island.⁴ Maine’s per capita expenditures of about \$10 currently run about half the national average

- The Maine Development Foundation (MDF), created in 1978 to be an equal partnership between state government and the private sector in long-term economic development, has not since 1990 received its chartered state match of private funds up to \$250,000. Full funding from Augusta existed through 1990, but by 1994 the state had withdrawn its participation, thereby eliminating the “public” portion of the statutory “public-private” partnership
- The Office of Innovation was created within DECD in 2003 to coordinate Maine’s varied investments in R&D and technology, but was not staffed until 2005, when two positions were created through reorganization. It has a budget of just \$30,000
- Maine and Company, the private non-profit corporation that is the state’s main business attraction entity, has received no state support since Fiscal Year 2003, and in the six years prior to that received erratic appropriations ranging from less than \$30,000 to \$350,000. The organization has only 2.8 full time positions to dedicate to its work, and now lacks a marketing director, even though part of its mission is outreach

Nor have formal economic development programs been the only under-funded initiatives with important economic significance.

- Land for Maine’s Future, for example, has been a broadly popular, nationally celebrated initiative for making basic investments in the quality and character of the Maine landscape, an asset for Maine’s future economic competitiveness.⁵ However, despite Mainers’ approval of \$97

million for the bond program since 1987, funding of LMF has remained intermittent and inadequate. Twelve years passed between the first and second LMF bonds, and six more years before another bond was sent to voters in 2005. For the most part this funding has been inadequate to keep pace either with national leaders among states employing conservation bonding or demand in a changing state⁶

- A more recent case in point has been the wobbly launch of the newly created Fund for the Efficient Delivery of Local and Regional Services, an important effort to provide positive support to localities working to reduce local taxes by regionalizing local service provision. Established as part of the School Finance Act of 2003, the \$1 million initial pilot fund was supposed to receive 2 percent of the state's municipal revenue sharing funds (approximately \$2 million per year) and 2 percent of the state's general purpose aid for education (approximately \$20 million per year) to finance grants for feasibility studies and other development of municipal / county and school efficiency projects. However, that did not happen. In June 2005, the legislature suspended all funding for the grant programs. Ultimately, the legislature appropriated just \$500,000 for each fund for FY 2007—this despite the fact that \$3 million in grant applications sought the initial \$1 million in pilot awards on the municipal side. Again, a useful initiative with great potential to improve the Maine economy has been seriously hobbled

Similarly, Maine has under-capitalized a number of extremely promising innovation- and development-finance programs ensuring that their full potential has not been achieved. The propensity to spread resources thinly recurs in another critical realm: that of directly stimulating innovation and small-firm growth through targeted investments—a promising strategy that lies at the crux of Maine's economic initiatives.

Maine's future, in this respect, depends even more than most states' on its ability to foster innovation and support the growth of its numerous small and very-small companies. And yet, while the state has developed a number of smart responses to that challenge since the mid-1990s, Laurie Lachance notes that many of Maine's ventures remain smaller than optimal:

Maine spends only \$10 per capita on economic development, lower than 37 other states

Rank	Per capita economic development expenditures	
13	Vermont	\$32.25
18	Massachusetts	\$22.27
25	Connecticut	\$15.26
32	New Hampshire	\$12.58
38	Maine	\$10.13
47	Rhode Island	\$6.75
	U.S. Average	\$20.01

Source: ACCRA, 2006

- The Maine Technology Institute (MTI) was established in 1999 to spur private sector R&D activity, with a particular focus on commercialization. At the time, careful consultation with the American Association for the Advancement of Science (AAAS) determined that MTI should be funded with approximately \$10 million annually to optimally fulfill its mission.⁷ However, seven years later MTI's budget allocation of \$5.7 million remains at little more than half the recommended level
- Similar AAAS consultation also suggested an investment of about \$20 million a year in the Maine Economic Improvement Fund (MEIF), which can be used by the University of Maine System to invest in applied research and to support its commercialization. MEIF is currently funded at the \$10–\$12 million level
- Likewise, the Small Enterprise Growth Fund (SEGF)—created in 1995 and housed in the Finance Authority of Maine (FAME) to provide Maine small businesses and entrepreneurs a “patient” source of venture capital—has also remained smaller than optimal venture fund operation requires. Given standard management practices, even a \$20 million fund has an operating budget of just \$400,000 to \$600,000—not much when a fund typically requires several experienced partners to prime the pump and develop deals, along with plain old operating expenses. That the SEGF has been capitalized with just \$9 million in the last decade leaves it less effective and beneficial than it might be, with smaller deals done and less time spent developing its portfolio

That the state has not been able to bring to scale even modest ventures that were designed with Maine's small size and limited resources in mind underscores the state's persistent difficulty in bringing promising initiatives to the scale at which they might have true impact.

A related problem: In its efforts to be fair, Maine has spread its limited economic development resources too thinly, again undercutting effectiveness. Finally, Maine has a long tradition of spreading out what development resources it has, in keeping with the geography of its historically decentralized population and the multiplicity of its small business and residential centers. Perhaps this owes to the state's admirable ethic of equity. Perhaps it follows from the dynamics of a large legislature and the state's proliferation of municipalities. But in any event, as Lachance notes, Maine maintains a large number of development entities for so small a state, and tends—given that large number—to disperse its investments widely.

In this respect the state's institutional roster itself sprawls. For a small state with limited economic development dollars, as Lachance argues, Maine has a large number of relatively small, autonomous economic development organizations that ensures that while in some instances responsibilities overlap in others their individual capacities remain too small. The array of players is striking and sometimes confusing: Five federal economic development entities maintain offices in Maine. At least six other state entities, in addition to DECD, deliver economic development services in some form, including the departments of Agriculture, Marine Resources, Transportation, and Conservation, and the Maine State Housing Authority, as well as the quasi-public institutions FAME, the Maine International Trade Center, and Maine and Company.

- At the regional level, at least 11 organizations (councils of governments, regional planning commissions, or county development offices) also conduct economic development activities
- So do at least 43 municipalities that appear to have economic development staff
- There is a state chamber of commerce and 66 local chambers
- There are other economic development entities such as the Maine Development Foundation; Coastal Enterprises, Inc.; Cooperative Extension; and Women, Work and Community, just to name a few

But looking beyond this infrastructure, Maine has frequently spread its limited state-level economic development resources too thinly.

A recent case in point may be Maine's network of Applied Technology Development Centers (although the ultimate jury is still out as the state awaits completion of a formal five-year evaluation of the program). Created in 2001 with start-up funding of \$5.5 million, Maine's technology-business incubator initiative represents another plausible bid to help nurture the growth of Maine's new, and most innovative, companies—a crucial source of potential future growth. Unfortunately, the impulse to spread around limited funding (instead of focusing it) may be in classic Maine fashion undercutting the project's impact.

To begin with, instead of targeting this investment strategically by building, say, just two or three technology incubators in areas of the state that promised the greatest results in terms of high-tech business activity as cluster development theory would dictate, legislators chose to build seven centers—more than twice as many as could reasonably be supported. For various political reasons, moreover, legislative negotiations scattered the seven centers in geographically dispersed sites that placed them, in at least several instances, in locations remote from any likely chance of technology success. And then, finally, the state decided to invest in bricks and mortar—buildings—rather than to ensure sufficient operational support. The predictable result: A far-flung, operationally under-funded system has at times struggled to provide basic services to its clients, such as counseling and networking, as annual support from the legislature has swung around from \$550,000 in one year to much less than that in others. Today, most of the incubators are occupied and doing well enough for their regions, but only four or so of the centers can truly be said to be incubating “technology-based” startups. And at least one of the centers, the Thomas M. Teague Technology Center of Maine, in Fairfield, intended to incubate biotech enterprises, remains so far away from either university research centers or the southern Maine critical mass that its excellent wet lab facilities have attracted virtually no tenants. So again, the results appear mixed rather than catalytic: By dispersing limited resources around the state, what was initially supposed to be Maine's technology incubator system has drifted somewhat from its initial focus.

CHALLENGE

MAINE'S OFTEN HIGH COSTS OF GOVERNMENT AND AN UNBALANCED REVENUE SYSTEM HINDER THE STATE'S ABILITY TO PROMOTE SUSTAINABLE PROSPERITY

Maine's variable but often-high costs of government—and the revenue system that supports them—represent another major influence on the way Maine is developing.

High government costs in some areas, to begin with, may “crowd out” needed spending in other areas. Meanwhile, an imbalanced tax structure—especially one heavily reliant on the property tax—can distort location decisions, contribute to sprawl, and send adverse signals about the state's business climate.

In Maine's case, recent efforts to restrain spending—state spending growth has been limited to 3.5 percent a year over the last four years—contend with a longer-term legacy of past expenditure growth compiled by governors and legislators in

both parties. Likewise, recent efforts to mitigate the most burdensome aspects of the tax system through increased property tax rebates and a partial repeal of the tax on business equipment have only begun the process of tax reform.

And so the state faces a tough juncture. For now at least, possible overspending in large areas of state and local government (such as on school bureaucracies or corrections) is at once depressing spending on other areas crit-

ical to Maine's future prosperity (such as economic and community development, workforce training, and natural resources enhancement), and exacerbating the burdens of Maine's unbalanced state-local tax system.

Possible overspending in large areas of state and local government is at once depressing spending on other areas critical to Maine's future prosperity, and exacerbating the burdens of Maine's unbalanced state-local tax system.

ON THE SPENDING SIDE, PARTS OF MAINE'S STATE AND LOCAL GOVERNMENT SYSTEM IMPOSE HEAVY COSTS ON THE STATE THAT ARE SQUEEZING OUT NECESSARY INVESTMENT IN OTHER AREAS EVEN AS THEY CONTRIBUTE TO HIGH TAXES

Concerns about the costs and efficiency of government in Maine flow in large part from the state's relatively high tax burdens. Maine perennially tops new rankings of total state and local tax burden (as a percentage of income), and each time it does new calls rise for shrinking government and cutting taxes.⁸ The arrival of the so-called Taxpayer Bill of Rights, known as "TABOR," on the November 2006 ballot, represents just the latest expression of the tax complaint.

However, there remains another reason to examine the location, size, and structure of Maine's state and local expenditures: program "crowd out." Crowd out occurs in times of slow revenue growth when spending growth in one area almost inevitably claims resources that would otherwise flow to other areas.

In this fashion, current state and local spending patterns beneath the aggregate statistics pose stark choices about the state's priorities. In fact, so long as the economy grows only modestly and governments hold the line on taxes, high, misdirected, or inefficient spending in one category almost always necessitates less spending in others, whether to sustain Maine's high quality of life, stimulate economic growth, or re-skill older Maine workers to help them prosper in the innovation-driven industries of tomorrow. Such dynamics, in short, make it more important than ever to assess the efficiency of spending patterns to make sure Maine makes the most of every dollar.

In this context, new research carried out for this report—along with a look at recent state budget trends—describes both key sources of the state's high state-local tax burden and the impact of that spending on other accounts.

Conducted for Brookings by Philip Trostel of the University of Maine's Margaret Chase Smith Policy Center, the new analysis of 2002 U.S. Census data probes the cost and efficiency of Maine's provision of 21 distinct state and local government service categories using a single methodology, comparing in each case Maine's state or local government payroll, employment, and expenditure levels to national

and rural comparison-state norms.⁹ In each case, Trostel's analyses—while in no way definitive evidence of "excess" spending or inefficiency given the difficulty of fairly comparing program quality and other outputs across states—point nevertheless to areas in which more detailed assessment may

confirm inefficiency and potential savings. (To read the full analysis and access function-specific analyses and data tables please visit www.brookings.edu/metro/maine.)

What does the work show? Overall, the analyses confirm that aggregate government expenditures *do* consume a larger than average share of Mainers' personal income. But beyond that, these inquiries provide a fresh look at *where* the costs may lie, and offer hints of several areas where inefficiency as opposed to state preferences may have elevated them. And here the results are clear: Primary and secondary education represents by far Maine's top government-efficiency challenge. After that, state spending on health and corrections appears both heavy and possibly inefficient, while local government—which on balance is quite frugal in Maine—bears scrutiny in faster-growing regions where it must contend with new demands for suburban-type services.

Four findings matter most:

1 **Maine spends a lot on state and local government, as a percentage of income, compared to other states.** First, the new analysis confirms that Maine does spend a lot on state and local government expenditures. This can be seen by setting aside spending on quasi-private enterprises such as public hospitals that generate revenues, subtracting out transfers from the federal government, and then analyzing Maine's expenditure levels as a percentage of personal income. Assessed this way, Maine spent 15.1 percent of its total personal income on state and local government, compared to the national expenditure rate of 13.4 percent. That



Maine's state and local spending—excluding quasi-private enterprises like hospitals and net of transfers from the federal government—topped 15 percent of personal income, ranking it eighth in the nation and first among rural states

Total State and Local Government						
	Payroll as a percent of total personal income	Rank	FTE employment per 1,000 people	Rank	Net expenditure as a percent of total personal income	Rank
Maine	6.4%	26	55.0	9	15.1%	8
New Hampshire	5.1%	50	50.6	29	10.3%	50
Rural States						
Arkansas	6.5%	21	52.2	22	13.0%	31
Iowa	6.8%	12	53.6	14	14.2%	11
Mississippi	6.5%	24	52.8	18	12.8%	33
Montana	7.3%	6	55.6	7	14.0%	18
North Dakota	7.4%	4	60.0	5	13.7%	20
South Dakota	6.1%	36	53.8	13	12.1%	41
Vermont	7.0%	7	60.4	4	13.6%	21
West Virginia	6.7%	14	49.7	33	14.1%	15
Wyoming	7.4%	5	71.0	2	13.9%	19
Rural Average	6.7%		54.0		13.5%	
United States	6.3%		49.5		13.4%	

Numbers are for FY2002 state and local governments combined, derived from data from the U.S. Census Bureau, Governments Division. Excluded from the analysis are quasi-private enterprises (such as hospitals, utilities, etc.); net expenditures are direct expenditures less transfers from the federal government

Source: Analysis conducted for Brookings by Philip Trostel, Margaret Chase Smith Policy Center, University of Maine

ranks Maine eighth among states for its total expenditures on state and local government—13 percent above the national expenditure level, and 12 percent above the average of the rural comparison states. Moreover, Maine's net expenditure was the highest among the 10 most rural states.¹⁰ So, the facts are clear: Governments do spend relatively a lot in Maine compared to other states.

As to the cause of Maine's spending, these data cannot by themselves reveal whether Maine's expenditures owe to a high inherent need for government spending, Mainers' particular preferences, or governmental "inefficiency." To assess the efficiency of Maine service provision definitively, moreover, would require detailed comparison between states of the outcomes their spending—an assessment that is beyond the scope of this report. However, that Maine rates as a state with "low fiscal need" in an important series of interstate fiscal comparisons published in the last decade suggests that Maine's high spending reflects more a mix of Maine's preferences and program inefficiency than a necessary response to demanding circumstances like high crime rates or a large school-age population.¹¹

Primary and secondary education is the single largest outlay, and appears one of the most costly. But Maine's relatively high aggregate state and local spending levels do not mean that all levels of government, or all state and local functions, exhibit similarly high expenditure levels. Far from

it: Maine remains well below national and rural norms in some spending areas, and well above them on others. And on the latter front, one thing stands out: On the largest item in the state and local budget—K–12 education—Maine spends much more than national and rural norms.

Altogether, Mainers—through some 99 independent school districts as well as 165 cities and towns with school payroll—spent on the order of \$1.6 billion on public elementary and secondary education in 2002, according to the new analysis. This represented nearly 46 percent of all state and local payroll in Maine and more than 70 percent of total local government payroll. What is more, this expenditure of 4.5 percent of the state's total personal income on K–12 education ensured that the state's spending exceeded the national norm by 10 percent, and ranked the state seventh-highest in the nation on this cost indicator. Per-student costs make the point even more clearly. In 2002, Maine's net expenditures per student approached \$8,000, a level that was nearly eight percent above the national average. That expenditure level ranked the state 11th in the nation in 2002, despite having just the 35th highest personal income. And the outlay exceeded that in every other rural state by at least 20 percent, except for Vermont which it exceeded by 4 percent.

Such figures suggest that Maine's primary and secondary education system costs at least \$150 million a year more than it would if its net expenditure per student were the same as the national average.

Maine's K–12 spending exceeds the national norm by 10 percent and ranks seventh-highest in the nation and first among its rural states

Elementary and Secondary Education						
	Payroll as a percent of total personal income	Rank	FTE employment per 1,000 people	Rank	Net expenditure as a percent of total personal income	Rank
Maine	3.0%	10	28.7	4	4.5%	7
New Hampshire	2.3%	43	24.6	15	3.7%	34
Rural States						
Arkansas	2.7%	21	24.0	19	3.8%	27
Iowa	2.8%	19	25.1	11	3.7%	33
Mississippi	2.6%	31	24.0	20	3.4%	43
Montana	2.9%	14	24.4	17	3.9%	24
North Dakota	3.0%	11	23.0	26	3.2%	47
South Dakota	2.7%	26	25.8	7	3.8%	31
Vermont	3.3%	2	31.8	1	4.2%	14
West Virginia	3.2%	3	22.6	30	4.4%	11
Wyoming	3.1%	6	31.6	2	3.5%	39
Rural Average	2.8%		24.8		3.8%	
United States	2.7%		22.2		4.0%	

Numbers are for FY2002 state and local governments combined, derived from data from the U.S. Census Bureau, Governments Division. Net expenditures are direct expenditures less transfers from the federal government

Source: Analysis conducted for Brookings by Philip Trostel, Margaret Chase Smith Policy Center, University of Maine

At \$8,000 per student, Maine spends eight-percent more than that national average on K–12 education, good for 11th in the country and first among rural states

Elementary and Secondary Education		
	Net expenditure per student	Rank
Maine	\$7,972	11
New Hampshire	\$7,951	12
Rural States		
Arkansas	\$5,403	44
Iowa	\$6,354	32
Mississippi	\$4,421	50
Montana	\$5,813	38
North Dakota	\$5,261	46
South Dakota	\$5,939	36
Vermont	\$7,696	17
West Virginia	\$6,656	28
Wyoming	\$6,148	34
Rural Average	\$5,727	
United States	\$7,416	

Numbers are for FY2002 state and local governments combined, derived from data from the U.S. Census Bureau, Governments Division. Net expenditures are direct expenditures less transfers from the federal government

Source: Analysis conducted for Brookings by Philip Trostel, Margaret Chase Smith Policy Center, University of Maine

How much of that expenditure represents inefficiency that might be reduced as a practical matter? Probably only a portion of it does. For one thing, Maine's high expenditures on K–12 education reflect the high value Mainers place on elementary and secondary education. Many Mainers no doubt support the added spending associated with the second-lowest student-teacher ratio in the country, at 11.5 to one.¹² By

the same token, many Mainers continue to adhere to their traditional preference for a large number of small, locally controlled schools, which also increases costs. And then, the fact remains that Maine's educational results are above average as measured by multiple indices, as notes the Board of Education's Select Panel on Revisioning Education in Maine.¹³ That suggests significant value is being delivered, although a full assessment of the relative cost-efficiency with which Maine achieves its classroom results remains beyond the scope of his report.

But for all that, significant savings probably could still be scored even leaving aside classroom and school-size changes. The reason: Maine's schools and school districts employ an unusually large number of administrators and

other non-instructional staffers whose presence drives up expenditures and suggests inefficiency. Maine's K–12 system employs, for example, one administrator for every 127 students, much higher than the average ratio of one to 212 and the nation's fourth-highest rate of administration. Likewise, Maine taxpayers support one school or district administrator for every 11.1 teachers—the country's 9th-highest number of

administrators per teacher.¹⁴ Such figures and others prepared by MPSRG's Michael Moore for this report suggest that Maine could realize between \$10 million and \$35 million in annual K–12 education-costs savings without closing or consolidating a single school by reducing “administration” costs to various national or Maine consolidated-district standards.¹⁵

At the state level, heavy spending in certain areas may be “crowding out” spending needed for enhancing the state’s quality of place, pursuing economic development and workforce development—or tax reductions. In this respect, Phil Trostel’s analyses of 2002 Census data suggest that Maine exhibits relatively high expenditure levels compared to other states in a number of state-level service areas. However, what makes this especially problematic is the fact that such spending—and the possibility of inefficiency in some of these activities—undoubtedly adds to the current “crowding out” in the state budget of environmental, economic development, and workforce funding—funding critical to enhancing the state’s quality of life and creating the economic growth Mainers need now and in the future.

“Crowd out” and the investment agenda. “Crowd out” results from the inexorable growth in recent years of state spending on health and human services (largely due to rising healthcare costs) and education in the context of slow revenue growth and finite resources.

Until recently these pressures were muted, but several factors are now starting to hit home. On the one hand, implementation of the state spending cap imposed by the landmark school-finance and tax law LD1 combined with Gov. Baldacci’s commitment not to raise a broad-based tax has greatly slowed spending growth. On the other hand, the impacts of continued health care inflation on the state’s Medicaid program coupled with the citizen’s initiative to increase the state’s share of all K–12 education funding to 55 percent (at a cost of more than \$200 million a year) are imposing new demands. Given that overall spending growth remains modest, these factors mean that as the state’s outlays for health care and education increase, the available funding for the rest of state government will decrease, which is now happening. While the share of the state budget flowing to K–12 and higher education and health and human services

COSTS OUTSIDE THE CLASSROOM: CLERKS, ADMINISTRATORS, AND UNNECESSARY COSTS IN CUMBERLAND COUNTY

The school districts in Cumberland County might be expected to be models of efficiency, and in some ways they are. With an average size of 2,500 students, the county’s school districts—more than three times larger than the state’s average size of 700—are large enough to enjoy economies of scale.¹⁶ Thirteen of the 19 districts are municipal units and can share administrative costs with their town government. All of the districts participate in cooperative purchasing plans for items such as fuel and food. And in fact,



because of these economies, the districts in the county actually do spend 15 percent less on system administration than the state average.

However, these efficiencies do not mean that Cumberland County’s school systems could not spend less—much less—to provide the same classes in the same school houses. The reason: Local control means that bureaucracy is duplicated in each district. Across the county there are 19 business offices, each one handling accounting and payroll. As a result there are 23 payroll clerks for the county’s 8,300 employees and a total of 68 business office employees. Even though the state maintains a single common accounting process, Cumberland districts employ seven different accounting software packages. In fact each district operates its own computer network, resulting in higher equipment costs, licensing

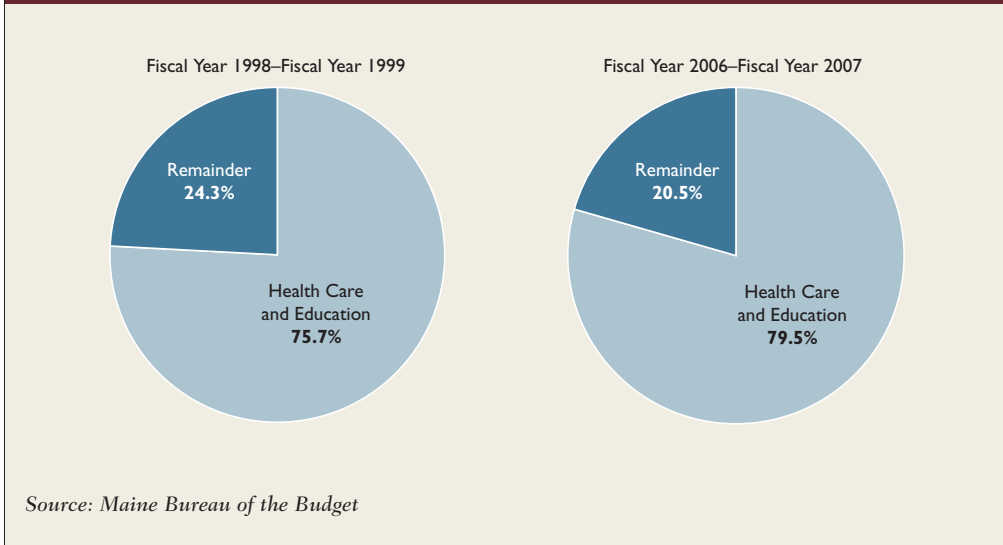
fees, training expenses, and repair costs. Moreover, school bus maintenance is also duplicated in each district. Consequently, county districts operate 18 bus maintenance facilities (some of which are shared with town garages), employ 21 bus mechanics, and pay 14 transportation managers.

Could such support functions be delivered more efficiently through a regional shared-service model? There are at least two significant obstacles. First, local school committees want control of their own services. And second, more than 100 different union contracts govern employment in these school districts, each with its own salary and benefit provisions. Still, some things are clear: A single county-wide business office would certainly not require 68 employees nor would a shared transportation maintenance facility require 21 mechanics and 14 managers. ■

Budgetary “crowd out” has ensured that key programs in economic development, workforce development, and environmental protection have shrunk or barely grown in recent years

State Government Appropriations, Selected Departments, Fiscal Years 2004 and 2007			
	Appropriations, FY 2004	Appropriations, FY 2007	Percent change, FY2004–FY2007
Education			
Department of Education	\$922,930,507	\$1,169,567,322	26.7%
Maine Community College System	\$40,614,117	\$46,068,617	13.4%
University of Maine System	\$172,596,418	\$190,596,418	10.4%
Health			
DHHS-Health Services	\$592,184,877	\$632,984,908	6.9%
DHHS-Behavioral and Developmental Services	\$260,195,143	\$267,776,211	2.9%
Remainder of State Government			
Department of Labor	\$21,199,955	\$15,389,261	-27.4%
Department of Economic and Community Development	\$13,200,217	\$11,734,836	-11.1%
Department of Environmental Protection	\$6,208,448	\$6,089,629	-1.9%
Department of Conservation	\$22,024,087	\$22,383,897	1.6%
Total State Government Appropriations	\$2,642,999,485	\$2,917,678,445	10.4%

Source: Maine Bureau of the Budget

Increases in state outlays for health care and education are crowding out all other areas of state government

by nearly 2 percent. The Department of Economic and Community Development has lost 11 percent of its appropriation. And the Department of Labor has seen its funding drop by more than one-quarter. In short, budgetary “crowd out” in Maine—while seeming to favor critical education investments—is taking resources away from other Maine priorities critical to the long-term prosperity of the state, such as the environment, economic development, and helping Maine workers cope with economic change.

State efficiency and crowd out.

accounts has risen from about 76 to 80 percent in the last five years, the share garnered by the remainder of state government has slipped from about 24.3 to 20.5 percent—and will now contract further as the 55-percent rule on education funding is implemented and as health care costs continue to rise.¹⁷

The result of these dynamics is troubling: As the state’s vast K–12 and health commitments grow, dollars are flowing away from what should be key elements of a drive toward sustainable prosperity along with education initiatives. The Department of Conservation has received no budget increase. The Department of Environmental Protection has been cut

the context of limited resources and the crowd-out dynamic, efficient service provision becomes even more critical than usual, since efficiency can ease the squeeze and even free up resources for other priorities. Unfortunately, the new Brookings / Margaret Chase Smith center evaluation suggests that in Maine a number of state services may be provided relatively *inefficiently* and, therefore, may be *exacerbating* the crowd out effect at the state level by consuming excessive funding that might otherwise be applied to other priorities or tax reductions.

Looking at the big “crowders” of the budget, K–12 education—with its heavy administrative overhead—is now increas-

ingly a state responsibility, given the new 55-percent rule, putting new pressure on other state accounts. Likewise, Trostel's assessments for Brookings suggest the need for careful scrutiny of the efficiency with which the state provides health services. In the health area, Maine's state payroll relative to income is 24 percent higher than the rural-state average, in a state-local category on which Maine spends three times the rural-state average as a share of income. (This suggests that theoretically there could be savings of over \$100 million here, although Mainers' public policy preferences for generous social services surely ordain above-average spending in this area).

Moving beyond the "crowders" into the "remainder" of the budget, Trostel's evaluations highlight several other areas where Maine state government spending may be inefficient.

- In higher education, Maine's low net state contribution as a percentage of state income might seem to suggest efficiency, since it trails national and rural averages by 26 and 45 percent. However, Maine higher education shows that the two need not go hand in hand. On a per-student basis, Maine's net expenditures of \$18,000 in 2002 slightly *exceeded* national and rural-state averages, with higher than average payroll flowing to non-instructional areas. In fact, Maine has the nation's *highest* ratio of "other" payroll to instructional payroll, with \$2.13 going to non-instructional payroll for every \$1 going to instructional payroll. Some of this may owe to the sheer number of separate institutions within the university and community college systems; some may owe to the existence of two systems. But at any rate, inefficiencies in Maine's higher education system may be costing the state \$14 million a year that otherwise could be reinvested in it
- The state's relatively high corrections spending in part reflects the fact that the Department of Corrections maintains Maine's entire juvenile and probation systems (which counties handle in many states). And ambiguities in the federal data analyzed mean it is possible the state-level spending figures are inflated. But even so, Maine's expenditures run 119 percent higher per inmate than the national average, according to Trostel's analysis. That means that the state might be able to save as much as \$79 million a year if it spent at a level equal to the national cost per inmate, although such numbers like all others here will require additional study

State-level expenditures and payroll also appear high compared to other states on several other more evenly "mixed" state-local functions.

- Maine's local payroll on financial administration (including tax assessment and collection) remains 4 percent beneath the rural average, but the state's financial payroll exceeds the non-urban state average by 24 percent. (If Maine had the same state government payroll relative to income as the other rural comparison states it would reap \$8 million in cost savings)
- Expenditures on Maine's "other government" administration (which includes state and local administrative staff) remain below the non-urban state average, yet state-level payroll overshoots the rural average by 48 percent. Spending on the legislature exceeds the rural-state average by 86 percent! (If Maine approached the rural-state average for "other government" expenditures it would save \$12 million a year)
- The state-government portion of Maine's public buildings categories may also be relatively expensive. On public buildings, Maine's total state and local expenditures are 138 percent above the rural average, but it is in state government where Maine spends the most. Maine's state expenditure relative to income exceeds the rural state average by 285 percent. (If Maine had the same general public buildings expenditure relative to income as the national average it could save \$42 million)

In sum, relatively high expenditures in a number of state-government areas clearly require scrutiny with an eye to their efficiency. To be sure, the data are preliminary and cannot fully resolve whether Mainers' settled desires or true inefficiency are elevating costs. However, it very much appears that at minimum avoidable overspending on school bureaucracies, non-instructional payroll, and sub-optimal administrative functions is exacerbating the crowd-out across Maine state government of spending on the services needed to sustain Maine's high quality of life, improve its economy, and help Maine workers.

For its part, non-school local government appears relatively frugal. However, its costs rise in more suburban areas. A final area of cost concern in Maine is municipal government—the mosaic of cities, towns, and counties that provides so many of the basic services on which Maine residents rely.

Currently, Maine's 1.3 million residents support no less than 504 of these general purpose governments—or about 3.9 per 10,000 people.

This incidence gives the state the seventh-highest ratio of

Maine's expenditures rank well above national and rural state averages in several areas, including K–12 education, corrections, and health

	Maine	United States	Rural average	Cost differential (in millions)
Total (percent of income)	15.08%	13.39%	13.50%	
Local Functions				
Elementary & Secondary Education (per student)	\$7,972	\$7,416	\$5,727	\$152 (8% > U.S. Average)
Police Protection (per crime)	\$5,242	\$5,434	\$4,365	\$6 (3% > U.S. Average) ^a
Fire Protection (percent of income)	0.23%	0.29%	0.21%	\$7 (10% > Rural Average)
Parks & Recreation (percent of income)	0.15%	0.34%	0.31%	
Sewerage (percent of income)	0.29%	0.35%	0.27%	\$7 (7% > Rural Average)
Housing & Community Development (percent of income)	0.06%	0.10%	0.03%	\$4 (22% > U.S. Average) ^a
Solid Waste Management (percent of income)	0.28%	0.22%	0.19%	\$25 (32% > U.S. Average)
Libraries (percent of income)	0.07%	0.09%	0.09%	
State Functions				
Higher Education (per FTE student)	\$18,035	\$17,892	\$17,307	\$14 (4% > U.S. Average) ^b
Corrections (per inmate)	\$62,273	\$28,466	\$26,490	\$79 (119% > U.S. Average)
Natural Resources (percent of income)	0.32%	0.22%	0.35%	
Social Insurance Administration (percent of income)	0.02%	0.01%	0.02%	\$2 (47% > U.S. Average) ^c
Other Education (percent of income)	0.35%	0.30%	0.49%	
Mixed Functions				
Highways (per 1,000 vehicle miles)	\$31.56	\$30.10	\$31.83	
Public Welfare (per single mother)	\$10,526	\$7,184	\$5,865	
Financial Administration (percent of income)	0.49%	0.37%	0.50%	\$8 (24% > Rural Average) ^d
Other Government Administration (percent of income)	0.21%	0.20%	0.23%	\$12 (86% > Rural Average) ^e
Health (percent of income)	0.87%	0.45%	0.28%	\$155 (95% > Rural Average)
Judicial & Legal (per crime)	\$2,321	\$2,633	\$2,178	
General Public Buildings (percent of income)	0.24%	0.12%	0.10%	\$42 (94% > U.S. Average)
Other and Unallocable (percent of income)	1.44%	0.79%	0.25%	\$238 (83% > U.S. Average)
<p>Numbers are for FY2002 state and local governments combined, and are derived from the U.S. Census Bureau, Governments Division. "Total" excludes quasi-private enterprises. Unless there is evidence of systematic cost differences in rural states, the U.S. average is used as the norm. a. After controlling for urban percentage and per capita income. b. In the Other Payroll subcategory. c. In payroll per unemployed person. d. In state government payroll relative to income. e. In the Legislative subcategory</p> <p>Source: Analysis conducted for Brookings by Philip Trostel, Margaret Chase Smith Policy Center, University of Maine</p>				

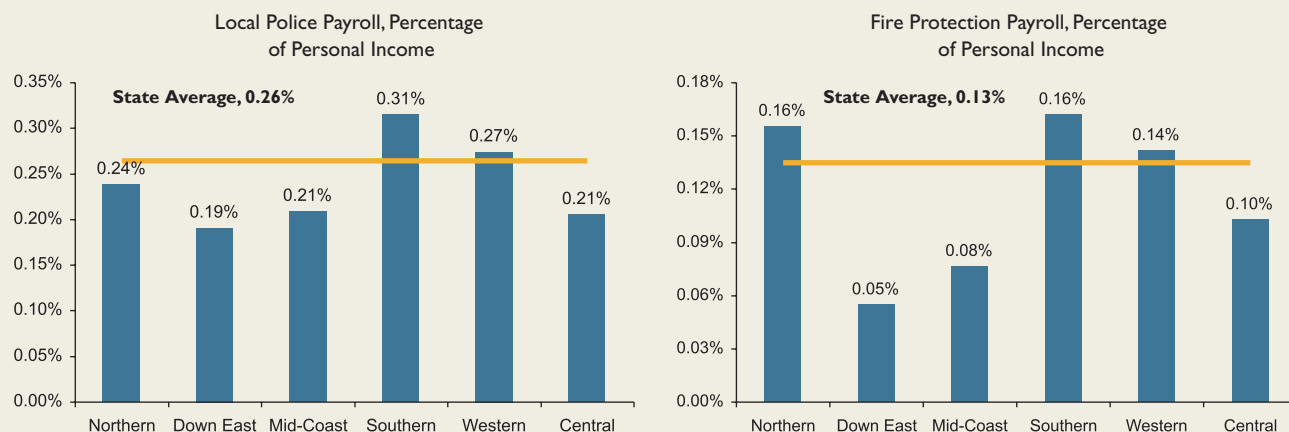
general governments to citizens in the country, and means Mainers pay taxes to maintain a general government for every 2,570 people (Californians get by with one government for every 65,770 citizens!). No wonder critics of Maine's local governments say that Maine towns are too numerous to be efficient, too small to reap economies of scale, and too parochial to work out less costly ways to deliver services.

And yet, here the evidence from the Margaret Chase Smith / Brookings analysis suggests that Maine's local government system remains relatively cost-effective in most places and for the provision of most non-education services.

On the one hand, much of the 2002 spending data suggests that Maine local government imposes rather low costs on taxpayers. On balance, in fact, Maine's local spending on such services as police protection, parks and recreation, and

libraries appears low in comparison to the nation, and in most cases is competitive with other rural states. This may owe to Maine towns' vaunted "frugality" and low service levels. It may reflect the fact that most Maine towns are still small enough to rely on volunteers and part-time staffs to deliver many services. And it may flow from the fact that in Maine the state tends to do relatively more than in other states allowing localities to do less. But whatever the reason, municipalities' spending on local services appears much more in line with national and rural norms than the state's massive school spending. Police spending as a share of state personal income, for example, remains 17 percent below the average of the other non-urban states. Local parks and recreation expenditures remain 51 percent below the average of the other non-urban states. And towns' library spending trails that of the average of the

Costs for local police and fire protection are higher in rapidly suburbanizing Southern Maine, exceeding all other regions and the state average



Source: Analysis conducted for Brookings by Philip Trostel, Margaret Chase Smith Policy Center, University of Maine

non-urban states by 22 percent. Maine towns, to that extent, are in many places providing basic services at relatively low cost.

On the other hand, the data do justify continued concern about the cost factors associated with the state's numerous small local governments in their provision of some services, in some regions.

Maine towns may not spend heavily on police protection, for example, but they may not be exactly efficient either. On a per crime basis, after all, Maine's police expenditures of \$5,242 exceeded the rural average by 20 percent. After accounting for differences in crime rates and income, it appears that localities in the state could spend \$6 million less on police.

Nor are Maine towns always frugal. For example, Maine's fire protection expenditures may undercut the national average by 21 percent as a share of state personal income, but they exceeded the average of the non-urban states by 10 percent in 2002. That implies that the state could shave about \$7 million a year from its annual fire costs if its towns had the same expenditure relative to income as the average of the other rural states. Likewise, sewerage expenditures are also low by national standards, but 7 percent above the rural-state average. That implies a potential savings of another \$7 million a year if Maine's net expenditure on sewerage as a percentage of personal income met the rural average.

Beyond that, the new data expose significant regional differences in the cost of localities' provision of some services—differences that hint, albeit not conclusively, at greater cost problems ahead for the state as it grows.

The tip, on this front, lies in the distinctive cost profile displayed by Southern Maine—the state's densest, most prosperous, and most rapidly suburbanizing region. Here, towns and school districts exhibit, at once, the state's lowest spending on education as a share of personal income and its highest outlays on police coverage, fire departments, parks and recreation, and libraries. Such data are suggestive, and likely reflect Southern Maine communities' simultaneous cost advantages in providing services (like education) with greater economies of scale and their struggles to control costs when suburban growth brings new demands for more and higher-quality services of other kinds. In this way, regional spending patterns on police and fire services point to future challenges. In mostly rural places like Down East, Mid-Coast, or Central Maine, costs remain modest, because police and fire services are either minimalist, largely volunteer, or provided by another level of government, such as the state police. But in rapidly suburbanizing Southern Maine, police and fire spending now exceeds state norms, as the new residents demand full-dress, professionalized services. To that extent Southern Maine's higher costs of basic service provision may well represent Maine's future.

And here is a final note: Crowd out may be taking place at the local level too. Given localities' heavy spending on primary and secondary education, little room appears left to support local parks and recreation programs, libraries, or even local road building. Maine ranks 38th among states for its spending on local parks and recreation payroll and 40th for library spending.

ON THE REVENUE SIDE, MAINE'S HIGH TAX BURDEN AND IMBALANCED STATE-LOCAL TAX SYSTEM MAY WELL BE DISTORTING LAND USE AND SENDING NEGATIVE SIGNALS ABOUT THE STATE AS A PLACE IN WHICH TO LIVE AND DO BUSINESS

Revenue raising, and notably tax levies, are where government spending hits home. And on this front Maine's relatively high and highly unbalanced tax burdens represent another likely influence on the state's development path.

To be sure, the nature of these influences (and even their existence) is the subject of a pitched, perennial, and ongoing debate.

Business interests and taxpayer advocates point to Maine's frequent high ranking on state-by-state tax-burden lists and assert that Maine's tax burdens across the board and in specific categories are keeping businesses from relocating from other states, and discouraging investment and hiring within Maine.¹⁸ Others counter that while taxes may be high, in the end, taxes don't matter very much when it comes to improving the economy or attracting new businesses.¹⁹ Still others are philosophical, and say that high taxes are inevitable because the state seeks to provide—in keeping with “Maine values”—high-quality public services while contending with the diseconomies of scale associated with a small and dispersed population.

Who's right, and what are the right things to worry about as the state tries to build a more sustainable prosperity?

Without trying to resolve this complicated and important debate, several things can be said about Maine's flawed state-local revenue system in the light of several new assessments of Maine's state-local tax system conducted for this report by Matthew N. Murray of the University of Tennessee at Knoxville. (To read the full analyses and access detailed data tables please visit www.brookings.edu/metro/maine.) According to these and many other earlier analyses, Maine taxes truly are high; Maine's heavy reliance on property taxes at the local level may well be contributing to sprawl; and while taxes may not matter as much as some say, Maine's high property and personal and corporate income tax rates

likely do hinder economic development if only by sending negative signals about Maine as a place in which to live and work. In addition, it bears noting that the state has taken little advantage of several opportunities to raise revenue that could take some of the burden off of Maine's property and income taxes.

In short, at least four problems—all interrelated—appear urgent.

First, it's true: Maine's combined state and local tax burden ranks well above the national average. Maine's taxes are high because Maine needs to raise a relatively large amount of revenue, and that is true because it spends relatively more than other states given its large K–12 and health outlays. U.S. Census data for 2002, for example, report that the state's net state and local government expenditures, excluding quasi-private enterprises like hospitals, came to about 15 percent of personal income—the eighth-highest total among the states.²⁰ Given that expenditure level, the state ranks similarly high for the total amount of revenue it must generate each year, which in 2004 came to about 18 percent of total personal income, the eighth-highest share in the country. Add in that Maine lacks the large public university and hospital systems that in other regions generate significant non-tax revenue, and the result is stark: Maine relies heavily on taxes to raise revenue, and that reliance is requiring some of the highest tax burdens in the nation (if not in New England).

How high are Maine's taxes? Calculated as a percentage of total personal income, Maine's state-local tax burden of 13 percent was the fourth-highest in the nation in 2004 (down from second-highest in 2002).²¹ Given that this ranking considers Mainers' “ability to pay” as reflected in the state's income level it suggests why many Mainers complain about their tax burdens.

Maine's total state and local taxes as a percentage of income remain high by both national and New England standards

State and local taxes as a percentage of personal income, 2004			
	State and local taxes	State taxes	Local taxes
Maine	13.0%	7.5%	5.5%
Connecticut	11.3%	6.7%	4.5%
Massachusetts	10.3%	6.4%	3.9%
New Hampshire	8.9%	4.4%	4.5%
Rhode Island	11.7%	6.7%	5.0%
Vermont	11.9%	9.2%	2.7%
New England	10.8%	6.5%	4.3%
U.S.	10.7%	6.3%	4.5%

Source: Analysis conducted for Brookings by Matthew N. Murray, University of Tennessee at Knoxville, using U.S. Census Bureau State and Local Government Finances data and Bureau of Economic Analysis personal income data

Maine ranks 13th for total state and local revenues collected as a percentage of income but fourth on taxes and second on property taxes

State and Local Government Revenue as a Percentage of Total Personal Income, FY2004			
	Maine	Rank	U.S. Average
Total Revenue	29.1%	13	25.9%
General revenue	24.9%	7	20.1%
Intergovernmental Revenue			
From Federal Government	7.0%	10	4.5%
From State Government	na	na	na
From Local Governments	na	na	na
Subtotal	7.0%	10	4.5%
Own-Source General Revenue	17.9%	8	15.6%
Percent General Revenue from Own Sources	71.9%	39	77.5%
Taxes	13.0%	4	10.7%
Property Taxes	5.5%	2	3.4%
Sales and Gross Receipts Taxes	3.5%	36	3.8%
Individual Income Taxes	3.0%	11	2.3%
Percent Own-Source General Revenue from Taxes	72.8%	10	69.0%
Charges and Misc. General Revenue	4.9%	27	4.8%
Percent Own-Source General Revenue from Non-Tax Sources	27.2%	42	31.0%

Source: Analysis conducted for Brookings by Matthew N. Murray, University of Tennessee at Knoxville, U.S. Census Bureau 2004 State Tax Collections data and Bureau of Economic Analysis personal income data

These figures are significant, meanwhile, because a large body of academic literature suggests that Maine's high taxes and super-high property taxes probably are influencing how Maine is growing. On the business side, the evidence shows that taxes exert a modest but real influence on where companies locate, particularly *within* a state, although it suggests too that in the final analysis a suitably skilled workforce, affordable rent, and quality public services all probably matter more than taxes in spurring growth.²² More broadly, Maine's high taxes likely have adverse effects on households and the broader public. First, they impose real costs on Maine households and businesses and may thus cut into personal spending or discourage investment. Second, they may discourage

in-migration.²³ And finally, high taxes may also contribute to a sour attitude that itself may send negative signals regarding the state's climate as a place to live and do business. In this respect, hand-wringing about the state's high tax burdens could become a self-fulfilling prophecy that translates into the reality of diminished economic opportunities.

High property taxes, meanwhile, dominate Maine's revenue picture, and almost certainly encourage sprawl.

Maine's top revenue problem, however, may well be its over-reliance on high local property taxes. Maine generates a huge portion of its revenue by taxing property. Therefore, it's not surprising the state's total property tax collections reached 5.5

Average full value tax rates are considerably higher in regional hubs than other towns; the lowest average rate is found in Maine's fast-growing emerging communities

Full Value Tax Rates by Municipality Type, 2003

	Average	High	Low
Regional hubs	17.15	26.55	8.39
Older surrounding communities	14.48	27.28	3.81
Emerging communities	11.57	24.31	4.72
Rural towns	13.32	24.59	0.00

Source: Analysis conducted for Brookings by Matthew N. Murray, University of Tennessee, using U.S. Census Bureau State and Local Government Finances data and Census Population Estimates Program data

percent of personal income in 2004, giving the state the second-highest property tax burden in the nation. Virtually all of this high levy was imposed by localities (which depend almost totally on the property tax for their revenue), ensuring that local property taxes in Maine represent a significant cost for Maine households and businesses, even despite recent property tax rebates and the state's assumption of more responsibility for schools as a result of LD1.

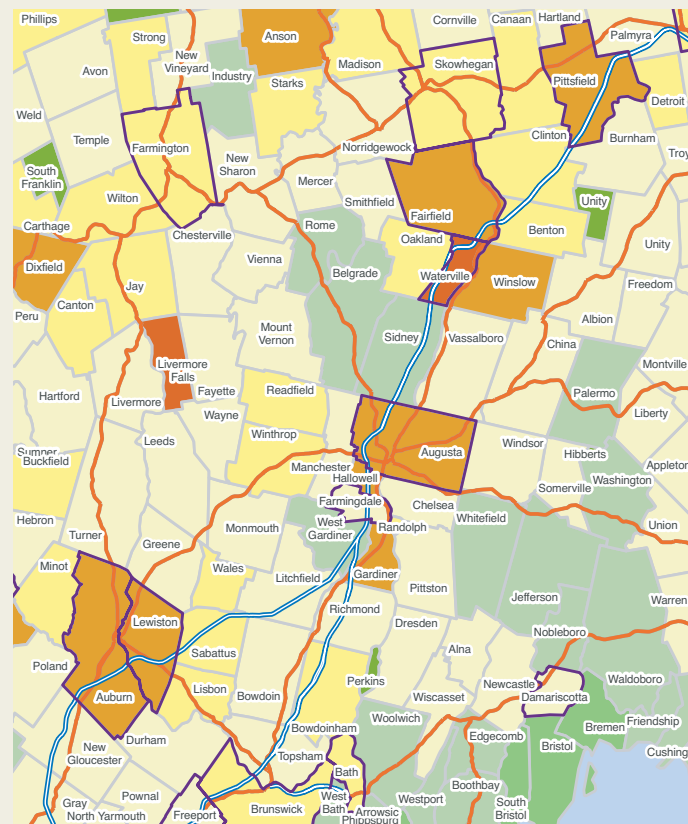
And yet, what is especially troublesome about Maine towns' extreme dependency on property taxes is not only the frequently high effective property tax rates that Mainers encounter in many towns but the extreme *variation* of those rates from one place to another.

This variation owes in part to individual towns' particular tastes in service provision and in part to the heavier service demands placed on traditional hub communities. It also reflects the large amount of tax-exempt property that is often concentrated in Maine regional centers, where institutions like state offices, hospitals, or community college campuses serve regional clienteles. Currently, such hub communities—while containing just 40 percent of the state's property value—host more than 60 percent of Maine's tax-exempt property of regional importance.²⁴ Such exemptions reduce these municipalities' effective tax base by more than \$2 billion and so drive tax rates up.

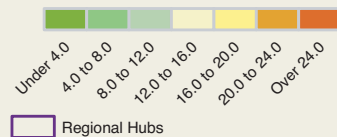
At any rate, considerable evidence suggests that high property taxes—especially in proximity to lower ones in nearby jurisdictions—can distort household and business decisionmaking, particularly at the local and regional level, where they are likely to contribute to suburban sprawl.

In this connection, both Timothy Bartik and Michael Wasylenko have reviewed the academic literature on how

Relatively high property tax rates in regional hubs like Lewiston, Auburn, Augusta, and Waterville—combined with much lower rates in nearby towns—add one more incentive for families and businesses to locate farther out in lower-tax towns



Full Value Mill Rate per \$1,000 of Value (State Average = 13.9)



Source: Maine Revenue Services

taxes—including the property tax—affect businesses, and concluded that while taxes have only a slightly negative effect on business location and investment at the inter-state level, their influence can be pronounced *within* regional economies.²⁵ What turns out to be especially problematic are significant rate differentials *within* states, and within regions.

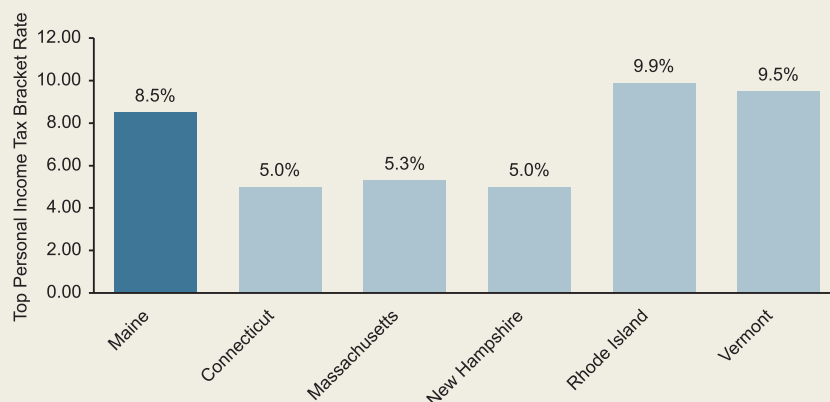
Moreover, where sharp differences exist in the tax rates of municipalities, the location choices of households and businesses may become so pronounced as to contribute to sprawl.

This is likely the case in Maine, as suggests Matthew Murray in one of the new analyses prepared for this report. (To read the full background paper visit www.brookings.edu/metro/maine.) In Maine, according to Murray, the average tax rate differential between regional-hub communities and emerging communities in 2003 exceeded 48 percent.²⁶ In the Down East region, the outlying town of Blue Hill enjoyed the lowest effective rate at 8.39 while nearby Bucksport had a rate twice as high at 16.64. Such differences create a strong incentive for families and businesses to locate outside regional hubs and may well represent an important contributor to suburban and rural sprawl. Surely such incentives are one reason that outlying, low-tax communities in Maine have been growing consistently faster than closer-in towns with higher tax rates.

Nor do these pressures appear to be slackening. Rate disparities actually increased slightly on average around the state between 1999 and 2003, notwithstanding evidence that overall property tax rates declined somewhat during the same period.

Heavy reliance on corporate and especially personal income taxes exacerbates revenue volatility, and sends negative signals about Maine's business and residential climate. Maine's personal and corporate income taxes raise two other issues. First, state government's reliance on income taxes for nearly half of its general fund budgeted revenue helps make Maine's revenue system relatively instable and prone to fluctuating flows. Ideally, state governments should seek a tax mix that produces a steady flow of revenue over the ups and downs of the business cycle. Such stability avoids the need to cut services or raise taxes during periods of economic contraction, and minimizes the accumulation of large sur-

Maine's top income tax bracket rate of 8.5 percent—while lower than Rhode Island's and Vermont's—significantly exceeds those in nearby New Hampshire and Massachusetts



Connecticut: Resident estates and trusts are subject to the 5 percent income tax rate on all of their income. Additional state minimum tax imposed on resident individuals, trusts and estates that are subject to the federal alternative minimum tax, equal to the amount by which the CT minimum tax exceeds the CT basic income tax (the lesser of (a) 19 percent of adjusted federal tentative minimum tax, or (b) 5.5 percent of adjusted federal alternative minimum taxable income). Separate provisions apply for non- and part-year resident individuals, trusts and estates

Maine: Additional state minimum tax is imposed equal to the amount by which the tentative minimum tax exceeds regular income tax liability

Massachusetts: Part A income [tax rate of 12 percent] represents either interest and dividends or short-term capital gains. However, interest and dividends are taxed at the same rate as Part B income, 5.3 percent. Part B income [tax rate of 5.3 percent] represents wages, salaries, tips, pensions, state bank interest, partnership income, business income, rents, alimony, winnings, and certain other items of income. Part C income [tax rate of 5.3 percent] represents gains from the sale of capital assets held for more than one year

New Hampshire: Five percent on interest and dividends only, regardless of filing status

Rhode Island: Twenty-five percent of the federal income tax rates, including capital gains rates and any other special rates for other types of income, that were in effect prior to enactment of the Economic Growth and Tax Relief Reconciliation Act of 2001. The top rate can reach 9.9 percent

Vermont: The tax amount in the schedules is increased by 24 percent of a taxpayer's federal tax liability for: additional taxes assessed due to early withdrawals from qualified retirement plans, individual retirement accounts, and medical savings accounts; recapture of the federal investment tax credit; or tax on qualified lump-sum distributions of pension income not included in federal taxable income. The amount of tax is decreased by 24 percent of the reduction in the taxpayer's federal liability due to farm income averaging

Source: 2005 State Tax Handbook, CCH, Inc.

pluses during periods of expansion.²⁷ However, Maine's heavy reliance on income (along with sales) taxes at the state level, and especially on its highly graduated personal income tax, does not provide stability. To the contrary: In its current form, the state's income-tax oriented revenue system produces revenue flows that rise and fall rapidly with the business cycle, leading to strong revenue growth in good times but also abrupt downturns such as traumatized the state in 1991 and again in 2001. In fact, a forthcoming new analysis concludes that only two states have greater personal income tax "elasticity" than Maine.²⁸ To that extent, the state's heavy dependency on income taxes increases the year-to-year uncertainty of budgeting and so makes it harder for the state

to bring bold plans to scale and stick with them.

At the same time, the high top rate (and low threshold for that top rate) of the personal income tax, remain problematic.

Taxes may have only moderate documented impact on individuals' and businesses' behavior. However, tax rates and burdens do become important reference points both within and outside the state—reference points that can become key facts in a self-fulfilling narrative about a state's business climate and residential attractiveness. In Maine's case, the high top rate and low top-rate threshold of the personal income tax are frequent points of complaint, given that Maine's high top rate of 8.5 percent kicks in at a taxable income of just \$18,250 for singles or \$36,550 for joint filers. To be sure, low-income taxpayers fare well under Maine's highly progressive brackets, which buy Mainers a degree of equity.

But at the other end of the scale the state's 8.5-percent top rate remains the eighth-highest in the country—and hovers more than three points higher than Connecticut's and Massachusetts'

(although it has now been overtaken by Vermont's and Rhode Island's). That rate combined with the large number of Mainers it affects clearly prompts widespread complaint—complaint that may be sending negative signals to retirees, relocating workers, and high-income individuals, potentially discouraging residency.

At the same time, the state has missed important opportunities to raise revenues that could support property- or personal income-tax reductions, or a better-balanced revenue system. Currently, Maine relies far too heavily on property and personal income taxes. One reason for this is that the state has not availed itself of several other opportunities for revenue-raising that could widen the state's effective revenue base and allow for reducing the high rates that must now be maintained on the highly visible property and personal income tax levies.

One missed opportunity for balancing the revenue system is Maine's low utilization of sales taxes.²⁹ At 5 percent, Maine's sales tax rate is relatively low by regional standards, and meanwhile, the choice not to tax many services further limits yields. Overall, in 2004, Maine ranked 36th among all states for the revenues it collected from sales and gross receipts taxes, which totaled just 3.49 percent of total personal income. This low utilization is one reason Maine ranks so high among the states for its property- and income-tax levels.

Related to this missed opportunity for balancing the system is Maine's underutilization of selective sales taxes and levies on services like amusements and entertainment, lodging, aircraft rentals, chartered flights, and the like that cater to Maine's millions of visitors and tourists.³⁰ Such taxes offer opportunities to "export" tax burden onto Maine visitor and non-residents. However, Maine taxes neither property rental nor leasing when 45 states do, nor aircraft rentals, nor chartered flights—all services that cater to visitors. Likewise, Maine's lodging tax of 7 percent falls slightly below the regional average of 8.12 percent. In each case, Maine's neglect of a possible revenue-raising opportunity places more burden on the state's high property and income taxes, and fails to seize on a justifiable strategy for balancing Maine's

Currently, Maine relies far too heavily on property and personal income taxes.

tax system and recouping some of the now-uncompensated costs the state and localities incur to provide services to Maine visitors.

For that matter, it can also be said that the state has not done enough to export portions of its heavy property tax burden, given that non-residents own more than two-thirds of Maine's \$28 billion in second-home property.³¹ To be sure, Maine's high property taxes have the incidental effect of taxing out-of-state homeowners, while the state's recently expanded homestead exemption has the secondary effect of exporting more of the burden. Still, the state has been slower than some others to explore stratagems for taxing second homes and other property owned by out-of-staters. This, too, has kept taxes on Mainers higher than they might otherwise be.

CHALLENGE

BARRIERS TO DEVELOPMENT IN REGIONAL HUBS COMBINED WITH WEAK REGIONAL GROWTH MANAGEMENT ARE ERODING THE STATE'S UNIQUE CHARACTER AND CONTRIBUTING TO SPRAWL

A final influence on how the state is growing is its regulatory environment for real estate development—the statutes, policies, and practices that inform and guide where investment tends to occur and construction takes place.

Firm, clear development rules and planning structures allow communities and regions to grow smoothly and project a desired pattern of development. More specifically, streamlined rules for development in established areas—combined with sound mechanisms for local and regional growth management—have the power to allow older communities to absorb new growth while reducing the often-chaotic sprawl that can weaken traditional centers and deface Maine's cherished countryside and working landscapes.

Unfortunately, Maine currently possesses neither streamlined rules for development in older places nor planning systems that channel growth effectively toward the most suitable locations. Instead, the state makes do with development rules that actually impede development in its traditional centers and welcome it into outlying places. In that sense, Maine's development and redevelopment rules are clearly exacerbating Maine's unfortunate combination of abandonment (in many places) and constant population dispersal.

Maine currently possesses neither streamlined rules for development in older places nor planning systems that channel growth effectively toward the most suitable locations.



NUMEROUS BARRIERS TO DEVELOPMENT AND REDEVELOPMENT IN REGIONAL CENTERS CONTRIBUTE TO THE DISPERSAL OF MAINE'S POPULATION

On the one hand, a thicket of awkward state and local rules, codes, policies, and practices impedes development and redevelopment activity in the state's established communities, especially the towns and cities that are its regional centers.

Maine is sprawling in part because its own rules and procedures shunt development away from already built-up areas.

This is unfortunate, because—as a new analysis prepared for this report indicates—established towns and regional centers in every area of Maine contain plenty of room to absorb much if not all of their regions' projected residential and commercial development. (To read the full analysis please visit www.brookings.edu/metro/maine.)

But instead, development continues to spread out across the landscape far beyond the boundaries of more established hub communities in part due to how difficult it can be to build within them.

“Do one and you're done,” is how some Maine developers working in older communities sum up their often-frustrating experiences of trying to pull off in-fill development projects in the state's regional centers. And it's true: In a number of respects Maine's accumulated impediments to development in its traditional hub communities keep redevelopment costs high, deter revitalization, and increase the development pressures on Maine's open spaces and rural landscapes. In this way, Maine's state and local policies and regulations frequently make the right things in development difficult and expensive, and the wrong things (such as random sprawl) not only easier but cheaper.

Three sorts of barriers require scrutiny: the state's convoluted building codes; current local planning and zoning practices; and its under-funded state reinvestment programs.

Maine's convoluted building codes hamper development in established places. Developed to ensure the safety of structures, building, fire, elevator, and other regulations exist to protect Mainers from shoddy construction and to

limit the destructiveness of fires (through requiring fire doors, multiple exits, etc). Modern codes cover everything from the width of hallways to electrical wiring components.

However, there is a problem. Code compliance in Maine, as in many other states, has become so convoluted and time-consuming as to significantly drive up construction or rehab costs in many towns without providing significant additional safety. While many code issues affect development in all parts of the state, aspects of this problem have an even greater impact on the state's more established regional centers. It can often be more complicated to do development in existing places because development needs to work in an existing urban framework, which may mean rehabbing existing buildings, or the challenge of assembling large parcels, or even reconfiguring existing street plans. This means that any added layer of complication makes it that much more difficult to focus redevelopment in older hub communities. Maine has taken several steps to improve matters but still contends with a tangle of code-related problems.

Code proliferation and conflict. To begin with, Maine has never had a mandatory, uniform building code. Until 2004, a municipality could choose not to have a building code at all, or choose to create its own, or choose to use any number of national model building codes available. The result has been predictable: Maine's crazy-quilt of code regimes makes the state a kind of museum exhibit of building-code history.

The vast majority of municipalities have no building codes. Among the towns that have adopted codes, variation prevails. Up until the late 1990s, many Maine towns adopted some version of the basic building codes developed by the Building Officials Code Administrators (BOCA). Since 1997, some towns have embraced the International Building Code (IBC) for commercial buildings and the International Residential Code (IRC) for single family homes—a pair of products known as the international codes, or “i-codes” created by the



International Code Council (ICC) to replace the older BOCA code. In addition to BOCA and international codes, a few Maine towns have decided to adopt a competing set of building codes developed by the National Fire Protection Agency (NFPA).

Additionally, nothing requires municipalities to update whatever code they do adopt (this, despite the fact that both the i-codes and NFPA codes are updated about every three years). The result is a confusing accretion of old and new building codes that interfaces sometimes confusingly with the state's other relevant professional codes and complicates the work of developers and builders. Today in Maine, there are municipalities whose official code is the 1961 version of the BOCA code, municipalities that have codes from the 1980s, and municipalities that have adopted the latest 2003 international codes.³²

And the problem goes beyond the number and variety of codes to the confusing way they intersect, overlap, and sometimes conflict. For example, a place that adopted a version of the international code prior to 2004 will be at odds with state fire code, because the international codes have their own fire requirements within them. Likewise, there are other codes and regulations that need to be taken into consideration. For example, projects need to pass state elevator inspection and meet the Americans with Disabilities Act (ADA) regulations. If a local building code doesn't require ADA or elevator specifics, it will still need to meet the relevant requirements set by the state.

What is the end result of all of this? It all comes down to awkwardness and costs. Without a uniform code, and no predictability in code enforcement, costs are added to projects as developers need to customize each project to each specific locality.³³ And the burden is especially troublesome when builders weigh the already more complicated work of building in older, more established areas. Or as Sue Inches, the deputy director of the State Planning Office has testified, "The lack of consistent and reliable standards for reusing these valuable resources act[s] as a disincentive to redevelopment." In short, the state's wide variety of code regimes only complicates determining

what, exactly, is "up to code" in a Maine regional hub. Ultimately, such confusion can stymie development in Maine's existing cities and town centers and drive it outwards across Maine's suburbanizing and rural locales.

Code biases against redevelopment. Beyond the inconsistent, multi-layered nature of Maine's body of codes, moreover, most of the codes on the books are decidedly unfriendly to development in established areas.

Most of the codes, for example, are geared toward new construction, as opposed to redevelopment, which means they impose heavy costs on those who want to work with Maine's large stock of historic buildings, which need to be expensively retrofitted to meet these codes.³⁴ Moreover, because the state's regional hubs retain more than half of the state's buildings built before 1950, this problem has a special impact on these places.

For example, a builder wishing to extensively rehab an existing 100-year-old building in a Maine regional hub for apartments or offices would have to fully conform to the municipality's building code. Yet that code may require—depending on the local building code in place—a hallway to be six feet wide.³⁵ So if the existing building has hallways that are five feet wide, the whole floor plan would have to be

STOPPED IN THEIR TRACKS: THE EFFECT OF CONFUSING AND CONFLICTING BUILDING CODES

In Gardiner, a downtown revitalization group partnered with a local property owner to bring a new business to a downtown building built in 1854. The prospective tenant was going to open a coffee house on the ground floor whose design would feature some of the building's historic elements such as an exposed brick wall and original tin ceilings. The fire marshal would not approve the renovation plans unless the property owner removed the original tin ceiling and replaced it with sheetrock because of the upper floor residential units. The partners tried other options, such as using a fire retardant paint on the tin ceiling, but these options were not accepted. Because of the added expense of bringing the building up to code, the tenant decided not to open the business and the

building remains vacant.

In Waterville, a three-story building that houses businesses on all three levels has an operating elevator. In 2004, the owner of the building was informed that his elevator was not up to fire code even though he had been paying for and receiving permits under the same code for several years. He was forced to put the elevator out of service because the distance between street level and the bottom of the top floor was 27 feet. The code only allows this distance to be 25 feet. Because his building was 2 feet too high, he would have had to spend \$25,000 to make the necessary changes. The top floors are now harder to rent because the elevator has been turned off. ■

reconfigured in order to rebuild the hallway. Obviously, this adds greatly to the cost of reconstruction, and is a cost borne especially by those who would build in Maine's established communities.

Other codes and regulations—including the Americans with Disabilities Act (ADA) and elevator safety codes—add additional considerations.

The ADA is necessary and important, but it poses a special array of challenges given Maine's extensive inventory of older historic buildings in traditional regional centers and downtowns. Federal guidelines for ADA require buildings serving the public to be accessible to those with physical limitations. Accessibility can be achieved either by providing physical infrastructure, such as ramps and elevators, or through the provision of additional services such as employee assistance to make deliveries or help disabled clientele with out-of-reach items. In Maine, however, the interpretation of ADA has been to require physical changes, which are often impractical in the state's older, historic buildings with under-utilized second- and third-story space.

Elevator regulation is another issue. To be up to code, elevators have to be large enough to accommodate not only a wheelchair, but a stretcher for emergency purposes. This requires a larger elevator, which requires a larger elevator shaft, which in turn can require massive reconstruction of the entire building. Elevator code issues are widely said to be limiting the redevelopment of the abundant second- and third-story space in many Maine downtowns.

Not only can these kinds of code issues add great cost to a project or kill it all together, the codes used in Maine have the unintended consequence of endangering one key element of Maine's brand—the historic feel and quality of the way its small towns look.

Code interpretation, enforcement, and training issues. Code interpretation, enforcement, and training bring still more problems. As with the state's general proliferation of local codes, the interpretation and enforcement of that profusion is a problem that affects all municipalities (and probably small villages most of all), but in more established centers adds a whole layer of complicating factors that may discourage redevelopment.

The state of Maine is responsible for certifying and training building code enforcement officials, but the responsibility to enforce building codes rests with the individual municipality.



Given the multiple authorities involved and the limited training code enforcement officials receive, problems inevitably arise. After all, it is up to the judgment of each individual code enforcement official to interpret the code, and judgment is fallible and can vary. At a minimum, interpretation can consume time and therefore money

with negotiation and dispute. Or as Lori Allen, the executive director of the Maine Downtown Center, writes in a working paper prepared to inform this report: "An inexperienced code officer can wreak havoc with projects, and it is both difficult and costly to challenge a code enforcement officer's ruling."³⁶ Moreover, because code enforcement has a subjective element, it can put code enforcement officers in the unenviable position of having to mediate between the different views of private developers, city officials, and the state fire marshal's office. And again these problems may blossom in the more complicated building environment of an established regional hub.

Local planning and zoning also can impede redevelopment in traditional regional hubs. In addition to code complications, local planning and zoning can also impede development in traditional centers and other older places.

In "Turning Around Downtown: Twelve Steps to Revitalization," downtown development expert and Brookings fellow Chris Leinberger says that making the right thing easy is a critical component of revitalizing downtowns and main streets.³⁷ This means making zoning "downtown friendly" by allowing mixed-use development and higher densities that promote compactness, walkability, mixed uses, and what Leinberger calls "urbanity."

In many parts of Maine, however, suburban-style land use is the norm—even within the state's traditional regional hub communities. This creates a number of problems.

Suburban-style zoning. Fostering even modest density in regional core communities, and promoting mixed uses there, is good for both the core community and for protecting farmland and open space elsewhere. Yet in many traditional regional hubs there are minimum lot sizes, height restrictions, and parking space requirements that make it difficult to extend or recreate the densely built Main Streets that give Maine towns their special character.

Granted, many established towns' downtowns are already currently zoned for higher density, multi-family develop-

ment—at densities of between six and 15 units per acre. Yet the fact remains that, outside of the downtowns, large swaths of even Maine’s regional centers are zoned at very low, suburban-style densities. These non-downtown portions of core towns are key opportunities to create walkable communities close to downtown amenities that help contain growth within existing places rather than expand out in the rural countryside. Yet in Waterville and Biddeford, for example, the residential areas outside of the downtown are zoned at about three units per acre and require a 150-foot frontage. In Auburn, it’s two units per acre with a required 150-foot frontage. And in Brewer, the town has zoned only one unit per acre. Such zoning inhibits the reemergence of traditional centers as a significant location for new development and true alternative to low-density sprawl.

Excessive parking requirements. Excessive parking space requirements also hamper development in the state’s more established communities. For residential projects, it is common to require two parking spaces per unit, which often must be within 300 feet of the structure. Parking space

Maine is growing away from its traditional centers in part because the state has made only minimal efforts to catalyze redevelopment, even despite its longstanding concerns about sprawl.

requirements for commercial buildings are usually tied to the square footage of the building or the number of employees in the building. Either way, the amount of space required to meet these ordinances makes it nearly impossible to create a walkable, compact downtown neighborhood.

In *The High Cost of Free Parking*, Donald C. Shoup describes the irony of towns’ focus on providing enormous quantities of “free” parking.³⁸ Parking regulations, in his view, are one of the single biggest drivers of sprawl. The amount of space required to meet parking ordinances, he believes, drastically reduces the amount of space for commercial buildings or housing. This simultaneously drives up the cost of housing while forcing development out as compact development becomes impossible. This is particularly damaging in a state such as Maine, which is replete with older, historic communities. “Parking requirements can freeze older buildings in their existing uses or even prevent any feasible use at all and there-

fore reduce the economic opportunities these building can offer to their neighborhoods.”³⁹

State programs that could help redevelopment efforts are underfunded. Finally, Maine is growing away from its traditional centers in part because the state has made only minimal efforts to catalyze redevelopment, even despite its longstanding concerns about sprawl.

Maine, to be sure, has created a number of programs that could potentially be used to help promote the redevelopment of Maine’s regional hub communities. However, all of these remain severely restricted by limited funding.

Or as Allen points out, “Maine, unfortunately, appears to have a habit of creating programs to invest in regional hubs, and then either underfunding them or not funding them, even when the programs demonstrate clear success.” Allen points to three examples of sound but under-financed programs: the Municipal Investment Trust Fund, the Maine Downtown Center, and historic preservation programs.

Municipal Investment Trust Fund. The Municipal

Investment Trust Fund (MITF) was created to fund community planning and infrastructure development efforts in regional hub towns, especially their downtowns. Over the course of its 13-year history, the fund has made 28 grants to projects involving everything from waterfront improvements and streetscape work to downtown parking garages, site preparation work for downtown hotels, and

Dover-Foxcroft’s Center Theater renovation. This kind of investment has the potential to transform a community by providing the kinds of seed money and infrastructure work that attracts additional investment, tenants, and activity.

But the MITF is hobbled. Over the years the fund has been capitalized through two separate bonds totaling \$10 million. However, it took 10 years from MITF’s establishment in 1993 for the program to reach that minimal funding level. And now it has been exhausted.

By contrast, Land for Maine’s Future (LMF)—which supports open space and conservation programs—has garnered far more support though it too is over-subscribed. Land for Maine’s Future has received \$95 million in bond funding over 20 years. Land conservation measures are valuable and important, but they are only half of the equation. Reducing pressure on open space by developing older, existing communities is equally important, yet such programs do not receive



the same support or attention.

The Maine Downtown Center. The Maine Downtown Center (MDC) is another case in point. Created in 1999 to encourage downtown redevelopment, the program is based on the National Trust for Historic Preservation's Main Street program, which has had wide national success. Currently, eight towns have been designated Main Street Maine communities.

But this program has also gone begging. Only in 2001, 2002, and 2006 has the center received any significant appropriation from the legislature (with \$75,000 appropriated in 2006), and in no year has the program garnered more than \$100,000. Consequently, the program limps along with an annual budget of \$80,000, when the average state Main Street program budget runs to about \$250,000 annually. Overall, Maine's effort represents the second-smallest state Main Street program in the country after Delaware.

To put this into relief, contrast Maine's anemic effort to Iowa's. Serving a similarly rural state, the Iowa Main Street program has a staff of six and an annual budget of over \$1 million, with state money contributing half of the program's funding. Instead of serving eight communities, as Maine does, Iowa serves 34.

Historic preservation. Finally, there is the case of the under use of the historic preservation tax credit.

Historic preservation, especially in a state such as Maine that has a large inventory of historic buildings, is an important tool for revitalization. In addition, due to a number of federal and state programs, historic preservation can be a financing vehicle that brings redevelopment money into traditional communities. Yet once again, these programs are underutilized in Maine.

The federal historic preservation tax credit gives a 20-percent credit for work done to rehabilitate a historic structure (the structure must be certified as a national historic struc-

ture by the National Park Service). This encourages reuse and revitalization of historic building stock, which otherwise may have been left to deteriorate. Many states, including Maine, have created state historic tax credits that complement the federal credit.

In Maine, though, neither the federal credit nor the state credit is used often. Between 2000 and 2005, the federal credit has only been used 19 times, which ranks Maine 42nd out of the 50 states in the number of historic tax credit projects completed. In Maine, the federal and state credits are "piggy-backed" meaning that

there is only one application process. Therefore, since its inception in 2000, the Maine state credit has also been infrequently used.

Why is this? It could be in part because the state tax credit is just not that attractive to investors, especially investors not based in Maine. This means that together, the combined package of the federal and state credits are not incentivizing enough to attract capital. The state credit is non-transferable and capped at \$100,000 annually per tax payer. This means that the individual tax payer must have a Maine tax liability in order to take advantage of the credit. Because the state credit is not transferable, i.e. the holder cannot sell the credit to another entity, this means that the state credit is meaningless to an outside investor such as a bank or a developer, who does not owe taxes in Maine. And because of the annual cap, the credit is not as useful for large projects.

Because the Maine state rehabilitation credit is directly piggy-backed on the federal credit, Maine is not able to innovate in the way other states have been able to. Rhode Island, for example, offers a 30-percent credit for income-producing projects, has no annual cap of any kind, and offers a 20-percent credit for owner-occupied residences (which the federal credit, and therefore the Maine state credit, does not allow). Missouri also has a 25-percent credit for both commercial and owner-occupied buildings, also with no cap.

The attractiveness of the credits designed like Rhode Island's or Missouri's brings in more projects and more investments. In Rhode Island, 111 projects are participating in the program representing \$485 million in investment. Rhode Island reports that for the \$145 million it invested in historic tax credits, it will add \$242 million to local tax bases, \$179 million in property tax, and \$2 million in additional sales and income tax revenue.⁴⁰

A LACK OF EFFECTIVE PLANNING AND GROWTH MANAGEMENT STRUCTURES LEAVES MAINE'S LOCALLY FOCUSED LAND USE SYSTEM VULNERABLE TO SPRAWL

But not only are the state's regulatory and investment policies impeding the absorption of growth into the regional hubs.

More broadly, Maine's ineffective state and local planning and growth management structures leave Maine towns and regions susceptible to dynamics that further weaken town centers, exacerbate sprawl, and degrade rural landscapes.

In this respect, the combination of an intensely localistic municipal government system utterly dependent on property taxes for revenue and a weakened state growth management program have left the state and its towns unable to manage the vast forces of migration and decentralization now playing across it. Such factors play a huge role in the way Maine is growing.

The intense localism of Maine towns leaves the state vulnerable to sprawl.

At bottom, the fundamental land-use problem the state faces is simple: The small size and large number of Maine's municipalities at once maximizes the tendency to sprawl while minimizing towns' ability to shape events around them.

On the one hand, the sheer number and variety of Maine's small jurisdictions ratchets up the sprawl dynamic.⁴¹

Highly dependent on property taxes for revenue, towns in some areas may drift into fiscal rivalry, competing with their neighbors for the most desirable commercial or industrial tax base while simultaneously shunting "undesirable" residential development for families farther out with large-lot zoning or building permit caps. In other regions, towns may find themselves either losers or temporary winners as homebuyers and businesses "shop" for the best deal available among towns' highly varied property tax rates.

But at any rate, these dynamics—sharpened by the state's sharp differentials in property tax rates—offer a strong additional incentive to households and businesses to locate out-

side established areas in farther-flung, cheaper locations. The irony is that as towns zealously defend their land-use autonomy they paradoxically wind up vulnerable to erratic development patterns.

Yet, on the other hand, there is a more fundamental problem: Maine's decentralized system of fiercely independent local governments doesn't just engender sprawl; it complicates its management.

Towns in Maine, in this respect, enjoy some of the highest levels of local control in the nation, yet their autonomy gives them little mastery.⁴²

Granted, Maine towns routinely collaborate on impressive efforts to "regionalize" land use planning, synchronize economic development activity, and systematize infrastructure provision. But for all that, the small size of Maine jurisdictions compared to the widening sweep of development in the state makes it that much harder for localities to channel sprawl as it rolls inland from the coast and outward from more established centers.

In this sense, the problem posed by Maine's local government system is one of scale, as both Evan Richert and Frank O'Hara have observed.⁴³ Locked into their 19th-century borders, most Maine towns retain boundaries that encompass 60 or 70 square miles on average. The trouble is, while that geography worked 100 years ago when Mainers traveled into town on horses and with carts, the rise of the car greatly expanded the range of daily travel. Today, many Mainers travel 20 miles to shop, or 30 miles to work or learn, instead of five or six. Consequently, commuting, investment decisions, and the search for an affordable home now play out not at the town level but across the state's 31 large "labor market areas". These areas encompass at least several hundred square miles, not just 60 or 70; they include not just a single town, but 15, 20, or 25.



The result: Sprawl, traffic, strip development, and rural subdivisions are now unfolding across expanses far too wide for the state's towns to manage by themselves. No wonder sprawl is flourishing in much of the state. Maine towns, as Richert writes, are "simply too small" to rein it in.

Compounding Maine's land use difficulties is a flawed state-local growth management scheme that offers towns little help in managing development. Exacerbating the state's fundamental land-use problem are several weak links in Maine's state-local growth management system that begin with the way it supervises planning and zoning at the individual town level.

To be sure, the program has its strengths. For one thing, the 10 state goals articulated in the state's main growth management act set out a desirable course for the state and remain broadly popular.⁴⁴ Likewise, as a recent Maine State Planning Office (SPO) evaluation of the growth law concluded, the statute has resulted in comprehensive planning efforts in many towns across the state—a fact widely valued.⁴⁵

But with that said, Maine's current state growth management system remains generally weak, and mostly unable to either help or require communities to manage growth successfully. Not for years has the SPO, the reviewer of local comprehensive plans, had the resources to provide sufficient technical support to towns or to the regional planning agencies that sometimes assist towns in developing land-use plans. Nor has the office, meanwhile, had the political wherewithal to either push towns to designate effective growth areas and rural areas, or to secure sufficient authority to review zoning ordinances for consistency with towns' comprehensive plans.

Consequently, the state's efforts to help localities manage growth have failed to yield substantial land use improvements. Some towns have never bothered to produce zoning ordinances that would implement the policies of their comprehensive plan. Elsewhere, nominally "consistent" zoning ordinances have failed to execute plans. As a result, very little of the state's growth is being directed into the "designated growth areas" specified by the local plans. In fact, according to the recent SPO evaluation, in two fast-growing towns no more than 2 and 7 percent of new growth in the last 10 years has occurred in specified "growth" areas, even though the local comprehensive plans each called for 70 percent of it to occur there.⁴⁶ In fact, according to the SPO, some 70 percent of the state's growth of the last 15 years had occurred in the rural areas of Maine towns—the very places local residents

state in their plans they want to protect. Such an outcome confirms that Maine's state-local growth management system is not working at the town level to channel growth toward the state's established centers and away from its pristine rural areas.

Maine's flawed growth management system also leaves the state's regions without effective regional planning or management. Even more troubling is the fact that Maine lacks any structure or mechanism that encourages, let alone requires, land use planning at the labor market or housing market level—the multi-town regional level at which land use and the economy operate.

Counties, of course, remain weak, and lack both the authority and credibility needed to referee regional growth trends. For its part, the SPO does ship some planning dollars to Maine's 11 regional planning agencies (regional planning councils and councils of government) to support the provision of technical assistance to towns. However, these dollars are minimal and in any case don't go for regional planning. What is more, since the councils depend on dues from membership towns, they in most cases have no authority and only modest influence on local land use or other policy.

The result is that because Maine's growth management system amounts to a patchwork of largely isolated municipal efforts, it remains unable to address the major growth drivers in each region. Witness the approval of the new Maine General Cancer Center out by the Augusta mall rather than downtown, the location of new turnpike exits in the Portland area, the spread of housing permit limits all over York County. All are shaping regional growth patterns in different parts of the state, and all occurred largely outside of the "official" growth management planning process. Or as the planner Frank O'Hara has observed: "Today, if there is an important decision to make about where to locate the shopping center, or affordable housing, or business park; how to clean up the river; how to help the homeless; where to run the walking trail; what to teach at the technical school, or where to locate the fire and police services, there is no structure to get the right people in the room, and once they are there, they have no authority to act."⁴⁷

Such is the great flaw of Maine's state-local land use planning system: When it comes to the critical regional scale, no forum with adequate authority exists to hash out where the growth really belongs. ■

V. AN ACTION PLAN FOR PROMOTING SUSTAINABLE PROSPERITY IN MAINE

How, then, should Maine proceed? How can Maine prosper as never before without relinquishing its unique character?

Without a doubt, the state stands at a critical juncture, given the trends it faces and the policy problems that hobble it.

With an economy in need of sustained investment to produce the broad prosperity Mainers want and expect, Maine remains a small state with limited fiscal options and high taxes.

With sprawl threatening the integrity of its towns and landscapes, the state likewise lacks the regulatory, planning, and other structures it needs to ensure it doesn't wreck what it cherishes.

And so Maine faces two principle challenges as it charts its future in an era of quickening change: First, the state must locate the resources to invest significantly in its most promising assets—its outstanding quality of place and promising research ideas and industrial clusters—without driving taxes up. And second, it must find new ways to revitalize its regional centers and manage growth while honoring the fierce independence of its towns.

Solve these riddles and the state has a great chance of crafting a broad-based, sustainable prosperity that yields many more quality jobs than the state has now as well as a rising standard-of-living for all.

What will it take to crack the code? Improving the economic and lifestyle prospects of all Mainers will take more than just dabbling around the edges. And it will take more than just tax cuts.

Instead, real change requires a new strategy. Specifically, true renewal requires a clear plan to invest heavily in what matters; to free up the resources to do that (as well as to reduce taxes) by making government more efficient; and likewise to modernize the state's development rules. In short, it's time for Maine to embrace a true business plan for seizing this moment, building on its strengths, and catalyzing a new era of sustainable prosperity.

Along those lines, this last major chapter of **"Charting Maine's Future"** proposes an action plan for promoting a new, broader-based prosperity in Maine by: investing in the essentials; slimming government to make investment possible and reduce taxes; and renovating the state's development rules and planning approach. Three major strategies are suggested:

- **Invest in building a place-based, innovation-focused economy**
- **Trim government to invest and finance tax reform**
- **Support the revitalization of Maine's towns and cities while channeling growth**

Move boldly in these directions and Mainers might yet find a way to prosper while preserving the best of what they've always loved about their state.



It's time for Maine to embrace a true business plan for building on its strengths and catalyzing a new era of sustainable prosperity.



THE STRATEGY:

INVEST IN A PLACE-BASED, INNOVATION-FOCUSED, HIGH-VALUE ECONOMY

To begin cultivating a sustainable prosperity, Maine needs first of all to focus its economic development strategy even more on investing in quality of place and emerging industry clusters. Such investments remain the best likely sources of quality jobs for Maine workers.

Too often half measures and a failure to follow through have undercut the state's recent efforts to stimulate job-creation and income growth. At the same time, Maine has frequently seemed to undertake "a little of everything" in its development work—invoking buzz words, spreading around limited resources.

The result: Maine's economic development efforts have been well-intentioned, but not always effective.

So now that must change.

In a ferociously competitive and ever-changing global economy, Maine must bear down. Specifically, Maine—a small state—must make some tough choices, and in doing so, cast a shrewd eye on its assets and deficits, knowing that it cannot do or be everything, and that building on its true and distinctive strengths

represents its only possible route to economic advantage.

What are Maine's strengths and its weaknesses, in terms of economic development?

On the deficits side, Maine remains a small state in a cold region without a major metropolitan area. Given that, it will never be able to finance the full panoply of economic development programs other states provide. Moreover, the small scale of Maine's industrial clusters and myriad firms means

A significant but affordable new bonding initiative is recommended that will enhance Maine's competitive advantage, catalyze new growth, and ultimately provide quality jobs.

the state lacks any single industry—such as auto-making in Alabama and stem cell research in California—on which to wager the state's economic future.

At the same time, though, the state possesses several clear economic assets that can serve as foundations for a sound strategy.

Maine's stellar quality of place, for one thing—its traditional towns and beautiful landscapes and seacoasts—constitutes a major, appreciating asset in an age when retaining and attracting workers and retirees matters intensely. Likewise, the state is already working to nurture its intriguing collection of unique industrial clusters in fields ranging from boat-building and advanced materials to GIS technology, biofuels, and organic farming that build on existing Maine strengths.

Which suggests the way forward: If the only enduring source of economic advantage is distinctiveness, as Michael Porter maintains, Maine should move to become *more distinct*. That is, it should move confidently to craft a distinctly Maine-built sort of regional advantage derived from its strengths.



And so the state should pursue three main initiatives aimed at producing more high-quality jobs for working people and a higher standard of living for all Mainers.

First, the state should continue to invest urgently in protecting and enhancing its top-notch quality of place, for that is its “calling card,” its brand, and its truest source of prosperity. Second, Maine should take to the next level its investments in R&D targeted on selected fields in which private-sector entrepreneurial potential and cluster activity already exists. And third, Maine should establish as part of that effort a new fund to foster the further maturation of its most promising innovation clusters as hives of new ideas, collaboration, and job-creation. In each case, a strategic but affordable new bonding initiative is recommended that will enhance Maine’s competitive advantage, catalyze new growth, and ultimately provide quality jobs.

INVEST IN MAINE’S QUALITY OF PLACE

Accessible wild places and tranquil country farms, human-scaled Main Streets and working waterfronts: These are what differentiate Maine from other places and in many respects drive its economy. Yet these assets are at risk. Development is encroaching on Maine’s coastal and inland lakes, limiting access. Rising land prices are motivating farmers to sell out. And closer in, the state’s longstanding centers—its regional hubs with their traditional downtowns—cannot often enough stem the flow of suburbanization to truly revitalize themselves. These centers like the green landscape cry out for investment. And so Maine should protect these assets and invest in them as sources of economic advantage. Hence the state’s first economic development need:

BONDING: A BRIDGE TO THE FUTURE

This report recommends that the state issue a \$190-million revenue bond to support a Maine Quality Places Fund and \$200 million in general obligation (GO) bonds to finance new innovation jobs and cluster enhancement funds. Can the state afford these investments?

Yes, it can.

Issuing bonded debt is one of the basic ways that a state invests in its future. Just as thousands of Mainers each year take out mortgages to achieve their dreams of homeownership, so too can government borrow with bonds to cover the up-front cash cost of a lasting public asset. Indeed, Maine has a responsibility to make such long-term investments in order to ensure its future economic competitiveness and quality of life.

A review of the facts places Maine in a highly favorable position to begin new borrowing. The current share of budgetary appropriations devoted to paying down bonded debt stands at only 4.07 percent, well below the informal “5-percent rule” established by the legislature in 1999, before which the state actually maintained a less-conservative 7 percent standard.¹ The state treasurer’s office estimates that, at present, the state could support as much as \$310 million in new bond authorizations under the 5-percent rule. Moreover, because Maine employs a rapid 10-year amortization schedule, it repays its bond debt quickly, which impresses bond rating agencies and frees up substantial new capacity for borrowing every year.

In fact, Maine’s current debt load is quite small when compared to the national average or selected peer states like Vermont, Kansas, or West Virginia. Measured on a per capita basis, Maine’s net tax-supported debt is only \$606, well below the 50-state average of \$1,060 or the 50-state median of \$754. Measured against total personal income, Maine’s state debt is 2.0 percent, less than the 50-state average of 3.2 percent or median of 2.5 percent.² Admittedly, Maine’s GO bond ratings are not as high as those of several peer states because of a lingering structural gap in the budget, citizens’ initiative activities, and the slow economic recovery. However, all three rating agencies agree that Maine’s debt position is favorable and its practices conservative. The market’s confidence in the quality of Maine’s position was demonstrated in the surprisingly successful bond sale of June 2006, which achieved a “true interest rate” of only 4.37 percent—less than 1 point above the previous year’s sale despite an intervening 2-point increase in federal interest rates.

All told, the state’s strong debt position is in fact a key asset that Maine should leverage as it builds toward future prosperity. Although lingering economic weaknesses have stunted revenue growth and hurt the state’s bond rating, Maine state government can address these challenges by bolstering the economy with the strategic investments advocated in this report. The Maine Quality Places Fund and the Maine Innovation Jobs Fund would in that sense represent two more milestones in Maine’s long record of prudent borrowing. ■

Establish the Maine Quality Places Fund to protect and enhance Maine's vivid townscapes, top-notch scenery, traditional uses of the land, and tourism industry. Maine's first step toward bolstering its economy should be to place investment in the state's incomparable quality of place on a steadier, more serious path with a sizable bond offering designed to:

- Promote the revitalization of Maine towns and cities
- Augment ongoing land and farm conservation
- Protect traditional uses of and access to Maine forests, farms, and lakes
- Promote outdoor recreation and high-quality tourism

Currently, investments in both Maine's "brown" and "green" infrastructure—its older established town centers and natural areas—are hit and miss. "A bond initiative here, some general funds during flush times there, do not make a winning, long-term strategy," is how the *Portland Press Herald* put it recently, and so it has been.³ Land for Maine Future's last \$12 million bond from 2005 has already been spent. So has

Consequently, the Maine Legislature should respond: It should create the Maine Quality Places Fund to make investment in Maine's "ace in the hole"—its unforgettable places—into a steady long-term strategy. To that end, a dedicated 3-percent hike in the state's lodging tax should be used to finance a 10-year, \$190-million revenue bond that would:

- Evenly recapitalize both the Municipal Investment Trust Fund (MITF) and Land for Maine's Future (LMF) at \$90 million apiece
- Provide an additional \$5 million within LMF to support access to and traditional uses of Maine's forests, streams, and ponds by hunters, anglers, and boaters
- Provide \$5 million to promote outdoor recreation and high-value tourism in Maine nationally and internationally with top-notch branding and marketing

Such an approach has much to recommend it. Tapping the state's slightly below-the-regional-average lodging tax for this purpose would appropriately place much of the cost burden of the new program upon Maine's millions of visitors, who

derive large benefits from the state's coastlines, forests, and towns while placing substantial pressure on them.⁶ Likewise, investing money financed from a dedicated revenue source in MITF, LMF, traditional use, and tourism promotion would properly yoke together the well-being of Maine's beautiful and productive open spaces and its historic towns while making their enhancement and use a permanent campaign. Nor should this still-modest investment

all \$10 million of the Municipal Investment Trust Fund's balance for downtown and related needs (and it took 10 years to generate that low capitalization through three separate bonds!). Meanwhile, the needs only grow, with one recent white paper placing the demand for investments in conservation, farmland protection, and recreation lands at \$85 million during the next two years alone.⁴ For its part, groups like the Sportsman's Alliance of Maine attest to a spreading crisis of access to traditional hunting and fishing spots as home development spreads and newcomers post traditionally open forest land or lakeshore. And for that matter, tourism expert David Vail of Bowdoin College writes of a serious slump in visits to Maine's most economically distressed "rim counties," owing in part to the state's inability to date to find a compelling way to frame the attractions of the northern forests, lakes, and rivers.⁵

represent the sum total of Maine's investments in its basic infrastructure of place. Instead, it should be viewed as a base commitment to a sustained strategy of making sure Maine holds onto the beauty and small-town community that sets it apart.



CONTINUE TO INVEST IN INNOVATION

If Maine's quality of place is an appreciating asset, new ideas and innovation are game-changers—the key to transformation.

Historically, Maine's economy turned on extracting wealth from its forests, its soils, and the ocean. Now, though, the global economy turns on ideas—not logs or cod but new products and services, more productive processes, vibrant industrial clusters brimming with smart business plans.

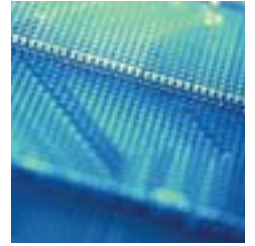
INVESTING IN PLACE FOR ECONOMIC GAIN: PENNSYLVANIA'S GROWING GREENER II STEWARDSHIP BOND

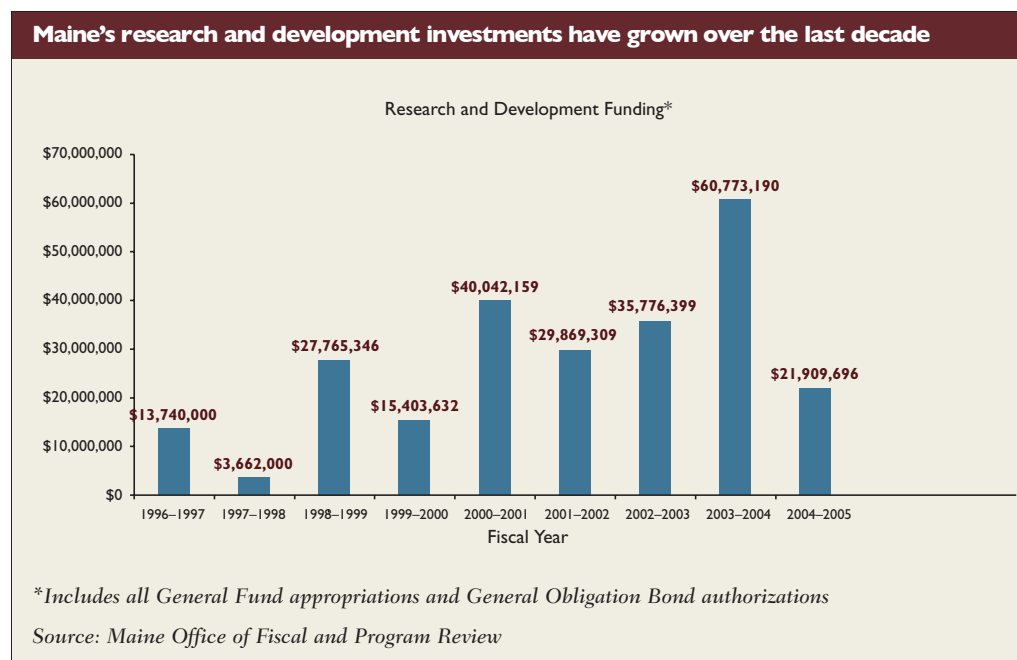
No state offers a more relevant model for investing simultaneously in towns and open spaces than Pennsylvania. In 2005, voters there approved by over 60 percent a \$625-million, six-year bond program explicitly aimed at boosting Pennsylvania's economy by investing significantly in its urban and rural quality of place all at once. That Pennsylvanians embraced bonding for their investment, however, is not what will be noteworthy for Mainers. Maine's citizens have frequently approved bonds for environmental purposes, and supported some \$97 million in issues since 1987 for Land for Maine's Future alone. Instead, what ought to intrigue Mainers about Pennsylvania's Growing Greener II program is its marriage of revitalization and conservation efforts, and its recognition that both sorts of quality-of-place investments are essential to a state's economic health. From the beginning, in this vein, Gov. Rendell and other architects of the Pennsylvania bond argued that the time had come to invest in both the state's natural resources and its towns and cities at the same time. Consequently, they structured a balanced and efficient plan of investment that will at once enhance Pennsylvania's urban communities with parks, redevelopment money, and brownfield remediation even as it protects the state's natural resources for tourism and traditional pursuits like hunting and fishing. In this fashion, Pennsylvania's Growing Greener II might well inspire a state with an even more illustrious recent history of investing in conservation. ■

For more information: See www.growinggreener2.com/

Which is why it is good that in 1999 the Maine Legislature recognized the importance of building a productive R&D infrastructure in the state. Starting then, the state created the Maine Technology Institute (MTI) to invest in promising technology companies; the Maine Economic Improvement Fund (MEIF) to stimulate the commercialization of University of Maine research; and other initiatives to stimulate developments in marine sciences, biomedical research, and patenting. These initiatives have in the last decade contributed to a 10-fold increase in Maine's still-low state R&D spending to a \$20 million a year base level, and catalyzed significant increases in total academic, non-profit, and industry R&D activity to the current level of approximately 1 percent of gross state product, or \$430 million a year (\$365 per worker).⁷ Granted, that level represents less than half the national average of states' research commitments and just one-quarter of the New England states' level. Nevertheless, such activity represents a major upgrade of the state's development capacity.⁸ Tangible gains have been scored in stimulating the commercial production of, among other items, new decking materials, salmon survivability, and high-technology textiles. And the benefits to Mainers are beginning to be felt. In just 2003 and 2004, 300 companies that received assistance from MTI alone generated over 600 new jobs paying 12 percent higher than the average Maine wage.⁹

And yet, more work remains at a moment when Maine's push to stimulate its innovation clusters is showing signs of drift. To be sure, direct state R&D expenditures have held steady since the late 1990s, but a lack of recent bond issues has brought significant decreases in total R&D spending since 2004. MEIF, as a result, still receives little more than half of the funding level originally recommended by the legislature's Joint Select Committee on Research and Development, while the same is true of MTI in comparison to original AAAS recommendations. In fact, MTI's funding has actually *slipped* since its inception despite a record of success and will likely run out of money for grants before the end of the 2006 fiscal year. Accordingly, Maine needs not only to recommit to building a high-value innovation economy, but go to the next level in investing in sectors in which Maine is demonstrating competitive advantage and prowess—whether it be in wood composites for the boat-building industry or the development of new products and processes in forestry and agriculture. To that end the state should:





Take Maine's drive to boost its innovation economy to the next level by doubling the state's R&D investments with a new Maine Innovation Jobs Fund. On this front, Maine should complement new quality of place investments with a major new round of investment in innovation. Already Maine has made significant progress in boosting its idea capacity while focusing on the niches and clusters in which Maine has the best potential to create jobs and wealth. Still, with numerous other states placing their own "big bets," now is no time for the state to waver in its push to stimulate Maine companies, research institutions, and entrepreneurs to generate new ideas, technologies, processes, and businesses. For that reason, the state must forge ahead with the drive to achieve higher per capita income by raising R&D that was first set out in the SPO's 2001 report, "30 and 1000."¹⁰

Specifically, the state should continue pushing its R&D effort toward the neighborhood of 3 percent of gross state product by doubling its total state R&D funding from the vicinity of \$30 million a year (in bonding and appropriations) to around \$60 million, a sum that could then leverage federal and private dollars at a ratio of up to five to one. To achieve this, the state will need to step up its R&D effort smartly to meet the rising bar of competition. To this end, it will need to issue something on the order of a three-year, \$200-million bond: the Maine Innovation Jobs Fund of which \$180 million should be devoted to new state investments in R&D. Investment of these resources, meanwhile, should occur with the same cluster-oriented focus and discipline that has characterized the state's recent R&D campaign. Existing efforts to stimulate research in such areas as advanced composite mate-

rials, GIS, toxicology, and coldwater aquaculture should all be stepped up. Funds aimed at the marine sciences and biomedicine should be replenished. And for that matter a new forestry-agriculture fund should be established to stimulate innovation in those changing industries, with an eye to creating growth in rural Maine. Do all of this, and Maine would take a major new step in reorienting its economy to focus on the innovation that in time will produce dynamic new firms, quality jobs, and new wealth.



CATALYZE JOB-CREATION AND WEALTH-FORMATION BY ENHANCING MAINE'S EMERGING INDUSTRIAL CLUSTERS

Finally, Maine must innovate in how it nurtures the development of its industrial clusters, the prime seedbed of future job-creation.

Maine, to be sure, has been doing a solid job in recent years of making clusters the organizing principle of its economic development strategy. Most notably, the state has through MEIF and MTI carefully targeted its R&D and early-stage commercialization investments on its most promising clusters, whether in advanced materials or information technology or forest products, and begun to see returns.

However, challenges remain, because the small size and sometimes embryonic nature of many Maine clusters clearly limits their present vitality. Some Maine clusters lack a strong or unifying industry association to spearhead work on shared problems like marketing or worker training.¹¹ Others lack dynamic joint-ventures, or rich and balanced exchanges between businesses, higher education, government, and investors. In short, the full catalytic potential of Maine's clusters remains to be unleashed.

Which is why the state should build on a recent Maine success and extend to more clusters a multidimensional new approach for stimulating cluster-based job growth by supporting industry-led efforts at workforce development, R&D targeting, market development, and capitalization all at once. To this end, Maine should:

Establish the Maine Cluster Development Fund to catalyze growth-producing collaboration in selected industrial clusters. Recently, a Maine project beat out more than 80 other state proposals to win a three-year, \$15-million federal grant from the U.S. Department of Labor to stimulate the creation of 2,000 jobs primarily in the boatbuilding and composites cluster. Crucial to the achievement was the so-called North Star Alliance's plan to address worker retraining, R&D, marketing, and capitalization issues simultaneously within a single cluster-focused, multi-party push. (See next page). By dint of that plan, an impressive consortium of industry organizations, research and education institutions, development organizations, and governments is now actively collaborating to transform the economy of coastal Maine by stimulating a whole industry cluster.

And so Maine should build on the North Star Alliance model of multi-dimensional, cluster-focused job creation by establishing a special \$20-million fund as part of the larger Innovation Jobs Fund to support five to seven competitively awarded cluster-development grants to business-led Maine public-private-academic consortia to stimulate cluster activity all across Maine. Once again, candidate clusters for awards run the gamut, from the evolving forest products industry, outdoor recreation and the eco-tourism sub-sector, and organic agriculture to the IT and biotech and precision manufacturing clusters. Moreover, while most of the new grants will be for \$1 million a year for three years, some awards can and should be smaller to facilitate early-stage planning within prospective clusters. In all cases, however, grants from the Maine Cluster Development Fund should support collaboratives similar to the North Star Alliance in that they should:



- Build the capacity for transformation by assembling under industry leadership participation and resources from a wide range of partners, including relevant industry associations, major research or education institutions, workforce entities, local or state government, and finance and philanthropy
- Bring a multidimensional approach to job creation by addressing—simultaneously—workforce development, R&D, market development, and capitalization and infrastructure development
- Prize initiatives that cross the boundaries between industries to forge multidisciplinary innovation

Moreover, while the new state money will help support the strengthening of potent new industry networks and problem-solving, it cannot and should not be used to create them. Promising cluster collaboratives for the most part come together on their own; their ability to cohere is itself an indication of promise. For that reason, those administering the new fund should stick to a strictly competitive selection process for selecting funding recipients.

Handled in this fashion, Maine's most promising industrial clusters will become the vibrant new sites of urgent projects to craft industry-specific workforce development, research, marketing, and finance solutions, all in service of a retooled Maine economy.

RETRAINING WORKERS AND CATALYZING GROWTH BY ENHANCING CLUSTERS: MAINE'S NORTH STAR ALLIANCE

What would a state-of-the-art push to catalyze growth by stimulating promising industry clusters look like? It would look a lot—at the outset at least—like Maine's new North Star Alliance, a comprehensive, multi-year initiative to systematically re-skill the Mid-Coast workforce and generate 2,000 jobs there. Focused especially on workforce development, the alliance shows how clusters can attack major industry problems and why they should be stimulated to do that.

To begin with, the new initiative—still in its initial planning stages—is targeting ample resources on a crucial economic problem at the right scale: that of the regional industry cluster. Bolstered by a \$15-million grant won from the U.S. Department of Labor, the sizable \$21-million project specifically seeks to reverse job losses in a key manufacturing sector—boat-building—and retrain thousands of workers for jobs elsewhere in the marine, building products, and sporting goods industries. In this respect, the project is endeavoring to seamlessly link job-creation and training by merging efforts to turn home-grown breakthroughs in the use of composites and advanced-materials technologies into jobs with an industry-led, cluster-based drive to develop the workforce. In this vein, several hallmarks of the effort bear noting:

- **North Star works at the cluster level.** Critically, the project recognizes that to the maximum degree possible economic development should be organized around sectors and niches—not programs or agencies
- **North Star is comprehensive.** The North Star Alliance explicitly embraces the notion that there are four “pillars” of economic development by building capacity and addressing gaps in: workforce development, R&D, market development, and capitalization and infrastructure development. This approach recognizes that Maine must address all of these issues in order to be successful and achieve the program's aggressive job-creation goals
- **North Star has private-sector leadership with strong public sector support.** The North Star Alliance is directed by a joint private-public steering committee with representatives of each of the affected industry clusters and key state agencies and institutions. North Star also leverages resources from a variety of ongoing programs to maximize its impact



- **North Star emphasizes sustained inter-firm collaboration.**

The effort includes three major industry associations: the Maine Composites Alliance, Maine Built Boats Inc. and the Maine Marine Trade Association, jointly representing over 285 companies in a range of manufacturing and service industries

Closer to the ground, what is perhaps most compelling about North Star is the fresh model it offers for grappling with one of Maine's most pressing problems: training and retraining an aging workforce. With industry in the lead, a whole new community college curriculum is coming together, using faculty jointly sponsored by industry and education and space within Maine businesses. Meanwhile, the effort is also generating a major apprenticeship effort and a K–12 program to introduce guidance counselors to opportunities in the industry. The lesson here is that when an industry gets organized, has a voice, and works together with other players—read: forms a cluster—things happen.

Maine should replicate the North Star Alliance. Focusing on other promising clusters, the state should foster and seek to enhance the activities of other cluster-based industry networks, as they seek to comprehensively address the outstanding workforce, marketing, and other challenges facing their sectors. ■

For more information: See www.mainesnorthstaralliance.org

THE STRATEGY:

TRIM GOVERNMENT TO INVEST IN MAINE'S ECONOMY AND FINANCE TAX REFORM

Next, Maine must address the inefficiency of how it governs and taxes itself, for that is the only way it will locate the resources it needs to invest wisely in growing its economy and begin the work of tax reform.

Currently, operating Maine's cumbersome machinery of state agencies, independent school districts, and local governments costs too much—probably hundreds of millions of dollars too much.

In some areas, redundant systems and excessive numbers of units pervade various state, school district, and sometimes even local government apparatuses. More generally, as Philip Trostel's research indicates, Maine is at least as much "Administrationland" as "Vacationland" given the large numbers of especially state and school-district administrative personnel that seem to populate the state's expensive bureaucracies.

As a result, not only are Maine taxes higher than they need to be, but—worse than that—millions of dollars of the state's scarce resources are being diverted from the sort of long-term investments in classroom learning, targeted R&D, or cluster-based economic development that are absolutely essential to produce more and better jobs and a more sustainable prosperity in the future.

In view of that, Maine must slim and restructure its at-times inefficient state-local government system with an eye both to financing needed investments in the economy and underwriting the first steps toward tax reform. To invest in its future Maine must become more efficient where it can, while preserving or improving the quality of the services Maine citizens count on.

Maine must slim and restructure its at-times inefficient state-local government system with an eye both to financing needed investments in the economy and underwriting the first steps toward tax reform.



MAINE SHOULD SCRUTINIZE ITS STATE AND LOCAL GOVERNMENT SYSTEM TO LOCATE COST SAVINGS THAT CAN BE APPLIED TO OTHER PURPOSES

The work of improving Maine's fiscal and tax future must revolve around a serious, disciplined, and systematic search for budget savings.

Right now, Maine's costs of government are too high and claim resources needed for other public purposes. To be sure, some of Maine's costs flow from its values—values that tend to prefer generous social programs, small schools, and lots of small-scale, highly accessible local governments. And that is fine. But in many other respects, as this report suggests, Maine's high expenditures on state and local government appear to owe not to "Maine values" or explicit priorities but the accumulation over time of redundant managerial layers, inefficient institutional structures, or excessive numbers of administrators dedicated to routine tasks like tax collection, "back-office" support, or corrections.

This accumulation may be drab and nearly invisible, but in fact inefficient government spending represents one of Maine's top public policy problems. It contributes to the

state's high tax burdens. It saps governments of productivity. And most importantly, it confronts Maine with a stark choice about whether it wants to make reforms in order to prosper, or accept the status quo and watch hundreds of millions of dollars worth of inefficiencies consume resources needed for investing in prosperity. In this sense, Maine's excess government expenditures (which represent potential cost savings) represent significant resources that can be captured and redirected to more pressing needs like economic development—if Mainers find the will to go after them.

And so Maine should seek those savings. With a systematic, rational, and pro-active set of initiatives, Maine leaders and citizens should move urgently to strip out government redundancies, cut excess expenditures, and rationalize bureaucracies so as to locate substantial fiscal savings—savings that can then be applied to catalytic investments in the economy or tax reduction. At least three major campaigns need to occur:



LOCATE BUDGET SAVINGS BY SLIMMING AND RESTRUCTURING STATE GOVERNMENT

First, Maine needs to launch a major, top-to-bottom review of state government, given its large size, its relatively high costs, and the potential fiscal savings therefore located there.

Urgent and incisive, this review and overhaul should be transformative. It should consist neither of edgewise budgetary adjustments nor the application of a new set of across-the-board spending targets. Nor should it look only at one or two state functions. Instead, Maine's search of savings should take the form of a deep-going, comprehensive analysis and readjustment of Maine service provision aimed not just at locating resources to be shifted to investments or tax relief but also at consolidating functions and improving performance so Maine gains a truly 21st-century government. To that end, Maine should:

Create and empower a Maine Government Efficiency Commission to methodically review the structure and operations of state government and propose specific reforms to eliminate duplication and inefficiency. These recommendations would be subject to a single up-or-down vote by the legislature. Maine's core drive to locate and achieve major fiscal savings from restructuring government should be to create a strong, high-level, expert commission modeled on the powerful Base Realignment and Closure Commission (BRAC) to develop a blueprint for securing perhaps \$60 to \$100 million annually in efficiency and structural savings within state government. This target for annual savings amounts to a modest 2 to 3.5 percent of the biennial general fund budget. The target should be modified downward if and only if the commission determines that the proposed cuts would compromise the effectiveness of state government, or flout Maine values.

How might this work? The Maine Government Efficiency Commission would consist of a bipartisan panel of 12 independent-minded and respected private citizens jointly appointed by the governor and the majority and minority leaders in the legislature and empowered to spearhead the efficiency search. Criteria for evaluating agencies and programs would be determined by the legislature with the assistance of the state's new Office of Program Evaluation and Government Accountability (OPEGA). But in any event the points of evaluation would include considerations like administrative efficiency, program quality, potential overlap with

other state or local programs or agencies, and overall cost-benefit concerns. In all deliberations, it should be emphasized, a crucial starting point should be the preferences and values of Mainers: To what extent do present spending patterns conform to Mainers' priorities?

Maintenance of program quality should also be a given.

As to its operations, the commission—once constituted—would move swiftly to:

- hire top-quality expert staff to conduct and out-source sophisticated program analysis, manage information flows, and prepare reports
- investigate and identify major sources of administrative inefficiencies and program overlap
- develop a coherent set of reforms to streamline, reconfigure, and improve the performance of state agencies and programs and yield on the order of \$60 to \$100 million a year in state budget savings
- combine its recommendations into a single "implementation bill" that it would report to the legislature within 18 months of commencing its deliberations and which would receive expedited consideration and a single up-or-down vote by the legislature, with no amendments allowed

In carrying out this work, the commission would conduct formal consultations with agency representatives and circulate draft recommendations for review and comment. The commission would also hold regular public hearings. But at the end of its 18-month process it would be understood that the implementation bill would be adopted or rejected *in toto* in short order, and that the legislature would apply all resulting fiscal savings to either supporting investments to improve the state's economic future (the first \$27 million a year in savings) or to provide tax relief. At this point, the commission would terminate, although the legislature could then choose to convene another "round" of reform.

In short, by creating the Maine Government Efficiency Commission the state will gain a strong, certain new mechanism for forcing legislators to achieve transformative efficiencies in a way that has rarely been employed at the state level. With a cost of perhaps \$2 million for staffing and administrative costs, such a commission appears the surest way to reinvigorate Maine government and shift hundreds of millions of dollars of spending to more productive uses in the coming decade.



REORGANIZE K–12 ADMINISTRATION AND SCHOOL CONSTRUCTION

The state’s huge K–12 education system also requires scrutiny and urgent reengineering as school enrollment declines. One of the most expensive in the country and the largest single outlay in the state-local budget, Maine’s system imposes heavy costs on taxpayers not just because of its small schools and small classes but also because of its cumbersome structure and complex, highly fragmented governance systems.¹²

Maine struggles with high K–12 expenditures, in this respect, largely because it maintains no less than 286 independent school administrative units (SAUs), cobbled together out of at least five different types of administrative systems, ranging from school administrative districts (SADs) and municipal units to community school districts (CSDs) and Education in the Unorganized Territory (EUT).

This complexity drives up costs in two ways. First, on the operating side of the ledger, it simply requires a lot of superintendents and administrators to run such a Byzantine system. All told, in fact, Maine school districts employ 152 superintendents and 50 percent more district-level administrators than the national average.¹³ But those are just operating costs. On the other side of ledger, the school system’s patchwork governance structure combined with the state’s strong traditions of local control ensures that school construction costs are also higher than they need to be. That’s because, in the absence of a centralized strategic weighing of construction requests, numerous local projects have gone ahead with little consideration of the potential for scoring regional economies of scale.



And so Maine must significantly streamline both the administration and the construction and renovation programs of its costly K–12 education system in order to capture significant potential cost savings that should then be redirected back into the classrooms. Four strategies will help:

Fully fund and enlarge the Fund for the Efficient Delivery of Education Services. First, the legislature should carry out the provisions of LD1 that established, along with the Fund for the Efficient Delivery of Local and Regional Services on the municipal side, a similar fund for supporting regional school initiatives.

Regionalized administrative districts are without doubt the path to K–12 efficiency, and already schools and districts are beginning to make progress in that direction through voluntary collaborations on everything from transportation services and central food service administration to joint athletic teams and district consolidation.¹⁴ Clearly, such collaborations should be encouraged, which was why LD1 called for the legislature to set aside 2 percent of its General Purpose Aid for Education (approximately \$20 million per year) to promote regional solutions with planning and implementation grants. Unfortunately, though, the legislature has not followed through with financing for this important program. Instead, most of the money that was supposed to be deposited has been diverted to “transitional aid” to protect districts receiving less money under the state’s reformed Essential Programs and Services (EPS) school finance formula. This decision flouted the intent of LD1 and should be reversed. The funding for regional projects should be fully restored.

Reduce Maine’s K–12 district-level administrative spending to the national average. Second, Maine should move rapidly to reduce the state’s total K–12 “system administration” expenditures to the vicinity of the \$195 per pupil national average.

This saving, it should be said, represents “low-hanging fruit.” Such a reduction in pure administration could yield about \$25 million in budget savings a year for Maine taxpayers, according to MPSRG’s Moore, and it could be achieved without tampering in any way with the number, size, location, or classroom programs of Maine’s schools. What is more, a ready-made mechanism for implementing the change already exists. Under the state’s Essential Programs and Services (EPS) school finance formula, every school district receives an annual allowance to cover, among other expenses, its system administration expenditures. Now, the allowance should simply be ratcheted down towards the national average system administration level. In this fashion, the state will at once capture \$25 million or so that could be redirected to student learning needs, and further encourage schools and districts to consolidate at least their myriad “back office” and administrative functions.

Begin the work of dramatically reducing the number of school administrative units (districts). At the same time, the governor, legislature, and commissioner of education should move to begin dramatically reducing the number of SAUs in Maine from the current 286 to a much smaller number—such as 64, the number that would result if Maine approached the national average district size of around 3,100 students.

Significant evidence now confirms that the state spends too much money on school district administration.¹⁵ Last year, for example, the Board of Education’s high-level Select Panel on Revisioning Education proposed saving large amounts of money in part by slashing the number of Maine’s districts from 286 to just 35.¹⁶ And more recently, fiscal estimates for the panel by David Silvernail of the Center for Education Policy, Applied Research, and Evaluation at the University of Southern Maine quantified significant but smaller possible savings from central office savings alone.¹⁷

And so the state should begin the process of change:

- First, the commissioner of education should immediately direct the Department of Education to employ its new accounting software to determine the true and accurate costs for system administration (now hard to ascertain) statewide and by region
- Second, the governor should create a high-powered study group composed of top Maine education, budget, and technical experts to report to the legislature in detail within 18 months on the current costs of K–12 administration and redundancy as well as on transformative ways to reduce those costs through SAU reorganization, shared service delivery, or other new governance and administration models
- And third, the governor and the majority and minority leaders in the legislature should appoint a high-level education reorganization commission, parallel to the Maine Government Efficiency Commission, to develop for up-or-down vote in the legislature a specific, bold plan for greatly reducing the number of K–12 administrative units and their associated costs so as to free up substantial resources for reinvestment in student learning. In this fashion, Maine would take a giant step toward efficiency by reinventing a K–12 school system in need of renewal

The reduction of Maine’s high K–12 administration costs represents in many respects ‘low-hanging fruit’ as the state seeks efficiencies.

Develop a statewide K–12 capital plan conceived from a regional perspective. Lastly, the Department of Education and the Board of Education should write Maine’s first-ever state school capital plan to ensure that the state’s future investments in construction and renovation are made rationally and that school buildings are adequately maintained in all communities.

Currently, the state lacks a comprehensive, research-based system analogous to EPS on the operating side for guiding school construction and renovation decisions. Instead, a locally oriented capital system frequently fails to consider how to maximize the use of existing facilities across regions, with the result that hundreds of millions of dollars of capital investment have been made without a clear view to optimizing the use of existing space. Which is why the state should revamp its school capital practices to ensure that school space across the state is used efficiently. To that end, the legislature should fund and the commissioner of education should create a comprehensive statewide inventory detailing the size, location, condition, and maintenance costs of all Maine school buildings. Then, with that inventory in hand, the department should work with the Board of Education to write a statewide capital plan to set priorities for construction and renovation in each region of the state, seeking to balance cost control and the need for economies of scale with the need to protect schools in truly difficult-to-serve geographic areas.

In all, the objective would be the creation neither of new schools nor larger schools but simply the best and most efficient use of all of the state’s existing and future buildings. Along the way the capital needs of older schools and schools in truly hard-to-serve places would be fully appraised. For the first time, in sum, the state of Maine would have an objective, systematic plan with which to evaluate future capital requests and focus decisionmaking on the need for efficiency.



AGGRESSIVELY PROMOTE REGIONAL COLLABORATION ON LOCAL GOVERNMENT SERVICE DELIVERY

Finally, Maine must step up its efforts to promote regional collaboration on local service delivery, most particularly in the faster-growing parts of the state where the costs of providing police and fire protection, parks, and other services frequently exceed the state norm.

Certainly, Maine local government lives up to its reputation for frugality in many areas of the state. Rural towns especially remain relatively cost-effective in their provision of most services, in part thanks to the living tradition of volunteerism. However, in areas like Southern Maine where growth is accelerating, localities’ inability to leverage significant economies of scale has begun to drive costs higher as the demand for higher-quality, suburban-type services rises. In these areas, regional cooperation and other forms of inter-local collaboration on service provision are clearly essential if Maine towns are to limit property tax burdens and provide services cost effectively. Moreover, since suburbanization is now enveloping more and more of the state, achieving such efficiencies is growing more critical. And so, the state should work harder than ever now to promote increasingly significant, deep-going cooperation on service provision among increasingly large groups of towns. At least two initiatives would advance the cause right now:

Fully fund the Fund for the Efficient Delivery of Local and Regional Services. First, the legislature should do what it said it would do. It should carry out the provision of LD1 that was supposed to stimulate the regionalization of local service provision with a steady stream of planning and implementation grants.

In tandem with the regional schools fund, the Fund for the Efficient Delivery of Local and Regional Services was intended to finance grants to help municipalities cover the planning and start-up costs that often precede the longer-term cost savings that result when towns come together to deliver local services. To support the effort, 2 percent of the state's municipal revenue sharing funds (about \$2 million) was supposed to be deposited in the fund each year to provide a rolling source of significant grants to jump-start local collaboration to reduce service costs. However, none of that money has been forthcoming, beyond an initial \$1 million sum for a pilot program and a subsequent \$500,000 appropriation. As a result, the initial pilot pool of funds has been

Currently, much good work is occurring as more and more municipalities begin to explore providing services on a regional basis.¹⁹ Still, progress remains slow and edgewise, confined usually to one function here or another there, in collaborations spreading usually across two or three towns only. And so the state should seek a breakthrough by establishing a major pilot project to assist a few select groups of Maine municipalities interested in working together to develop ambitious new forms of regionalized service delivery across multi-municipal service districts.

How should the pilot work? Like this: First, let the state select—through a competitive process—one or two truly ambitious proposals for completely reconfiguring the governance and service delivery of an area consisting of at least three contiguous municipalities and two coterminous school administrative units. Then, let the selected groups of towns receive the significant technical and financial assistance

needed to fully develop their ideas, with the assumption that each group of towns would create a new “municipal service district” to regionally administer K–12 education; carry out joint land use planning; provide key services such as police and fire protection; and set budgets and tax rates. And finally, have the state help the groups of towns implement their new unions. As a reward for that, towns partic-

ipating in the new unions should gain important benefits. The state might assume, for example, 50 percent of participating towns' (and school districts') general obligation debt. The school districts could receive a 10-percent bonus in school aid (deducted from non-participating towns.) And the state might pick up certain of the towns' net county costs, such as those for jails and registries and the like. (The pilot could be funded by \$1 million or \$2 million a year in savings from the Government Efficiency Commission's work.) In this fashion, a carefully monitored and analyzed “big experiment” or two could provide the state important new models for interlocal cooperation as well as documented examples of the sort of returns that may be achieved.

So let Maine launch a ground-breaking test of real-world experimentation in regional service delivery right away. It just might effect a breakthrough.



Currently, much good work is occurring as more and more municipalities begin to explore providing services on a regional basis.

exhausted by awards to 26 ventures including 121 towns, 12 of which promise to yield service-cost savings of \$11 million over three years through the implementation of plans, among others, to combine the accounting and finance systems of three towns, the police and fire services of two towns, and the jails of two counties.¹⁸

Such regional initiatives should be broadly encouraged. The legislature should fully fund the Fund for the Efficient Delivery of Local and Regional Services to jumpstart local collaboration to reduce service costs.

Support one or two major experiments in regionalized service delivery. But Maine also needs to think more boldly. Given the urgency of the cost challenge, communities must be encouraged to turn truly grand ideas for cost-saving into action. For that reason, the state should move now to finance—and showcase—one or two really far-reaching demonstration projects in multi-municipal reorganization and cost-reduction.

MAINE SHOULD ALSO BEGIN THE WORK OF SYSTEMATIC TAX REFORM

Finding efficiencies and reducing spending should not be Maine's only focus as it tends to its government finance system, however. Maine must also begin to reform its unbalanced, intrusive revenue system, even as it steps up its investments in its economy.

The revenue system matters because at least to a degree it can alter behavior and change outcomes.

In this respect, while virtually all state-local revenue systems violate the “neutrality principle” of tax-system design, in that they distort taxpayer behavior, Maine's system is arguably more intrusive than most because of its relatively high overall tax weight, substantial property tax burdens and rate differentials, and high income tax rates.

No, taxes may not matter as much as some believe. But at the same time, taxes matter enough that they are a problem in Maine. High rates of property taxation, especially in regional centers, are likely altering location decisions and contributing to sprawl. High personal income tax rates may be squeezing those of modest income and driving away those with high incomes. And the state's heavy reliance on just a few revenue sources may well be keeping key taxes high.

Ultimately, these and many other issues will need to be dealt with comprehensively through a major tax-system overhaul that thoroughly redesigns the state's system in accordance with such well-established tax-policy principles as:

- neutrality
- balance
- equity
- stability
- simplicity²⁰

Most notably, it will be imperative for leaders to address once and for all the tax code's extreme over-reliance on property taxes and its overly narrow sales-tax base.²¹

But in the meantime, the work of making incremental adjustments can and must begin, supported in large part by the budget savings to be located by the Maine Government Efficiency Commission.

And so, to the extent that government expenditure savings or new revenue sources can be found, the state should step up the work of reducing its overall tax burden while seeking to better balance an unbalanced revenue system. To that end, at least three near-term adjustments should be made.

Maine must continue to reduce property taxes, with a focus now on the towns in which the problem is most concentrated. Maine must work to lower the top rate of the income tax, and reduce exposure to it among those with modest incomes. And Maine must move to broaden its revenue base by “exporting” more tax burden onto Maine's millions of visitors and tourists.



Maine must also begin to reform its unbalanced, intrusive revenue system, even as it steps up its investments in its economy.

APPLY SAVINGS FROM GOVERNMENT EFFICIENCIES TO PROPERTY TAX REDUCTION

Maine must first continue to reduce the state's high property taxes by plowing significant portions of any future government efficiencies into tax relief.

Already the state has begun to make progress in lowering property tax bills, thanks to the implementation of LD1, passed in 2005. Not only have the legislation's increases in state funding for K–12 education slowed the rate of growth of local property tax commitments, but related expansions of the state's homestead exemption and “circuit breaker” property tax relief programs saved Maine homeowners \$65 million in property taxes and Maine businesses \$10 million in 2005.²² These broad reductions ensured that in 2005 the estimated state and local tax burden on Maine residents declined for the first time since 2000. Additional relief to businesses will come through the recent partial phase-out of the personal property tax on business equipment.

But Maine has a lot more work to do if it is to tamp down property taxes enough to erase the levy's likely distortions of household and business decisionmaking. In 2004, the state's second-ranking state-local property tax burden of 5.5 percent exceeded the U.S. average as a share of total personal income by 62 percent.²³ And in 2005, property taxes accounted for 59 percent of total state-local business taxes, a figure more than 20 percent higher than the national average, meaning Maine businesses' location decisions may be significantly more influenced by local property tax rates than those of firms in other states.²⁴

And so Maine must keep working to reduce the state's excessive reliance on property taxes for local revenue revenue-raising, with a focus now on reducing the state's sharp town-by-town rate variations and providing additional relief for those of lower incomes. Two initiatives would be helpful, and should each be funded with portions of the budget savings to be located by the Maine Government Efficiency Commission.

Target relief on towns with high volumes of tax exempt property. First, Maine should address the geographical nature of the property tax problem: high rates in key hub communities that contend with large amounts of tax exempt property.

So far, there has been little sustained conversation in the tax reform debates about focusing the fix at least partly on particular towns where the problem is particularly acute. And yet, large portions of Maine's population continue to reside in regional centers and older more established towns where the effective property tax rate may be 50, 75, or 100 percent higher than in emerging outlying communities. Moreover, in many of these towns large amounts of tax exempt property—such as hospitals and state office buildings—appreciably narrow the tax base and so add to the pressure. Granted, some tax-exempt organizations provide payments in lieu of taxes to the host communities to help offset the costs towns incur in providing municipal services to support the exempt organizations' activities. But for all that the payments remain uneven, voluntary, and almost always insufficient to offset the true costs of the services towns are providing. The result is one more pressure that drives rates up in traditional regional centers, discourages investment there, and in turn contributes to suburban sprawl. Relieving this burden would be an excellent way of targeting relief to the places where it is most needed.



The state, therefore, should respond: It should reimburse towns and cities for at least the municipal portion of the taxes foregone on tax-exempt properties that provide true regional services. These important properties include (by way of example) medical facilities like hospitals, colleges and universities, state buildings, county jails, and regional transportation facilities like airports. To address them, a new reimbursement program should identify appropriate categories of properties of critical regional benefit, work with local assessors to develop proper assessments of the relevant value, and ultimately reimburse municipalities based on their un-reimbursed non-school costs. To finance the reimbursements, a meaningful portion of the expenditure savings identified by the Commission for Government Efficiency beyond the first \$27 million that should finance economic development initiatives should be dedicated to offsetting the lost revenue on a continuous basis. If the efficiency savings cannot fully offset the lost revenue, the reimbursements should be allocated in proportion to the amounts that would otherwise be due.

In this way, Maine's ongoing efforts to reduce taxes would gain an admirable new focus. By targeting property tax relief on the towns in which the burdens are most concentrated the state would strike also at a key driver of sprawl and an impediment to the revitalization of the state's regional hubs.

Provide additional relief to lower-income households.

A second tax-related use of future efficiency savings could be to provide further property tax relief to lower-income taxpayers who continue to struggle with economic transitions, stagnant wages, and housing costs.

LD1 has already provided some relief tilted toward lower-income homeowners, and among other things doubled the property tax circuit breaker. Still, further relief could be afforded through both the homestead exemption and circuit breaker programs. For example, the state could further enlarge the homestead exemption. Or alternatively, it could raise the maximum refund to a higher level than \$2,000 per person or \$4,000 per household, or raise the amount of property tax eligible for benefits. Either way, this initiative should remain a secondary possible use of government-efficiency savings, once the innovation funds and top-priority tax-exempt property reimbursements are achieved.

APPLY SAVINGS FROM GOVERNMENT EFFICIENCIES TO INCOME TAX REDUCTION

Another priority for tax-system adjustments, in lieu of a major system overhaul, must be reductions in the state's high income taxes.

So far, recent efforts to smooth the rough edges of Maine's unbalanced tax system have focused most on reducing individual and business property taxes. And that has been appropriate. However, the next phase of incremental reform should begin to address the state's high top marginal rate on the personal income tax and the extremely low income threshold at which it kicks in. Few tax-system features send more prominent signals about a state's business climate or hospitality to migrants than the state's top income tax rate. Meanwhile, no broader tax pinch on Maine's moderate-income households exists than the state's low \$36,550 top-rate threshold for joint filers. For those reasons, Maine would do well to invest some of its future government efficiencies in reconfiguring its high personal income taxes, once it has financed investments in the economy and tended to the tax-exempt properties issue.

Maine would do well to invest some of its future government efficiencies in reconfiguring its high personal income taxes.

Reduce the tax rate for working- and middle-class families by raising the state's low threshold for its top income tax rate. One priority should be to raise the very low income level at which the state's very high top marginal income tax rate applies. Currently, Maine's personal income tax is highly progressive and rather lightly taxes those of very low income. However, the state's extremely low threshold for its very high top rate—\$18,250 for single filers, \$36,550 for joint filers—ensures that more than one-third of Maine tax returns are exposed to Maine's top personal income tax rate of 8.5 percent. In effect, hundreds of thousands of Maine working people are paying some of the highest state income tax rates in the nation.

Maine needs to address this problem as a way of supporting its hard-working middle class as the state navigates an anxious moment of economic transition. Applying \$27 million a year of future expenditure savings to a drive to raise Maine bracket levels by about 20 percent, so the top rate begins at about \$44,000 for joint filers, would be highly appropriate.²⁵

Lower the top income tax rate. Equally pressing is the need to reduce the state's top rate. Maine is fortunate in this respect to lie in a region characterized by high personal income tax rates, and where both Vermont and Rhode Island's top rates exceed Maine's. Still, the state's 8.5-percent top rate remains the ninth-highest top marginal rate in the country and sends a highly visible signal to the nation's increasingly mobile workers, business owners, executives, and retirees about Maine as a place to work and live. For that reason, lowering the state's top marginal rate by half a point would send an equally visible signal that would make Maine more competitive in attracting business while reducing the incentives for high-income residents to leave Maine or avoid retirement there. At a cost of \$40 million a year, such a half-point reduction would be another worthy option for using the yields of the efficiency commission.



TAX VISITORS TO SUPPORT MAINE'S NEEDS

Finally, Maine should explore the possibility of “exporting” more of its tax burden onto its millions of tourists, visitors, and non-resident second-home owners.

Currently, Maine does not appear particularly aggressive about taxing tourists and visitors. (To read Matthew Murray's detailed assessment of Maine's current “tax exportation” and opportunities for extending it please visit www.brookings.edu/metro/maine.) At a minimum, though, Maine's heavy and long-standing tourist and summer-residence traffic remains a tremendous opportunity for revenue raising.

Moreover, common sense as well as classical economic theory easily justify efforts to recoup at least a portion of the costs of the public services consumed by visitors and tourists, and argue as well that non-residents should be charged or taxed for what economists call the “negative externalities” of their activities.²⁶ Visitors may contribute to congestion and noise problems, as well as pollution of the environment, for example. Likewise, numerous studies have confirmed that heavy visitation—combined with under-investment—has taken a heavy toll on Maine's parks and park facilities, lakeshores, and tourist corridors.²⁷

For that reason, visitors represent a highly appropriate source for at least some of the resources Maine needs to invest in its economy and maintain and enhance the quality services and top-flight quality of place that Mainers cherish and that attract visitors in the first place. To begin tapping that source, then, Maine should take at least one immediate step, and meanwhile begin a longer-term exploration of other means for deriving appropriate revenue gains from Maine's large numbers of tourists, long-term visitors, and non-resident second-home owners.

Raise the lodging tax to finance the Maine Quality Places Fund. First, Maine should raise the state's lodging tax to generate a significant revenue stream to finance the general obligation bonds that will finance the critical Maine Quality Places Fund.

Presently, the state's 7-percent lodging tax remains more than a point below the regional average, and so represents a fine opportunity for exporting tax burden onto a large, non-resident population. Moreover, probably no more appropriate or effective mechanism exists for ensuring that non-residents and not Mainers will in fact bear the burden of the new tax aimed at maintaining Maine's quality of place, given that three-quarters of the lodging tax is paid by non-residents, mostly tourists.²⁸ And so the legislature should move to raise the lodging tax a significant three points in order to generate something on the order of \$20 million a year to pay for the bonds needed to capitalize the Maine Quality Places Fund with about \$200 million for the revitalization of Maine towns, conservation activities, and the promotion of high-quality outdoor recreation and tourism. Such a hike would represent an aggressive bid by Maine to recognize a key point of market advantage and leverage it to defend what makes Maine special.

Maine leaders should take a serious look at ways to tax the state's wealth of non-resident property.

Explore additional ways to tax visitors. Beyond raising the lodging tax, the state should also weigh the pros and cons of a number of other options that may exist for shifting the tax burden to visitors or summer residents in order to reduce the taxes Mainers pay or generate revenue for needed investments.

A number of methods for exporting portions of the state's heavy property tax burden merit exploration, providing several complications can be worked out.²⁹ On this front, the state's extraordinary number of second homes represents an attractive target for revenue-raising. As it happens, non-residents own more than two-thirds of Maine's \$28 billion in second-home property.³⁰ That suggests that finding ways to raise the taxes on second homes while extending further property tax relief to state residents only—through mechanisms like another major expansion of the homestead exemption, for example—could represent a viable strategy for effecting significant reductions in Maine residents' tax bills. However, such a state program would require careful structuring, as local governments would have to raise property tax rates and then be held harmless by Augusta for revenue lost under the homestead. And both paths are problematic. The state would need to find new revenue to finance the offsets to local government, and meanwhile, local governments' increased rates

would then increase the already high tax burden on business.

Yet there are other possibilities. One alternative approach for property tax exporting would be for the state to adopt a low-rate property tax (say of five mills) linked to a large homestead exemption (say, of \$1 million) that would protect all Maine residents. Then virtually no Mainer

would pay any new property tax while out-of-state homeowners would yield upwards of \$300 million in new revenue. Alternatively, the state could introduce a classification system for different types of property in the state. Currently, about half of the states utilize some form of classification system, and several—such as Utah and Minnesota—treat primary residences differently from non-homestead or second-home property. Conceivably, such a system could be applied at the local level to support lower tax rates on primary residences.

But these are only possibilities for further exportation. The point, in the end, is that Maine leaders should take a serious look at ways to tax the state's wealth of non-resident property. Maine needs the money.

AN ACTION PLAN FOR PROMOTING SUSTAINABLE PROSPERITY IN MAINE

ACTION

MAINE QUALITY PLACES FUND

This 10-year \$190 million revenue bond fund will support:

- Community revitalization
- Land and farm conservation
- Access to forests and lakes
- Tourism promotion

MAINE INNOVATION JOBS FUND

Some \$180 million of this \$200-million bond fund—financed by savings located by the Government Efficiency Commission—will support research and development in promising areas like:

- Forest bioproducts
- Biotechnology
- Information Technology
- Organic farming/specialty foods
- Advanced composite materials
- Precision manufacturing

A related Maine Cluster Development Fund of \$20 million will support industry-led partnerships that catalyze job growth through workforce development, network-building, and marketing

FUND FOR THE EFFICIENT DELIVERY OF LOCAL AND REGIONAL SERVICES

An annual stream of \$2 million—derived from savings located by the Government Efficiency Commission—will fully fund this existing program which promotes efficiency through inter-governmental cooperation on service delivery

TAX REDUCTIONS

Savings from the Maine Government Efficiency Commission in excess of \$27 million per year should go toward easing tax burdens through:

- Reducing property taxes
- Lowering the top income tax one-half point
- Increasing the income threshold for the top income tax bracket

MAINE COMMUNITY ENHANCEMENT FUND

Grants will support:

- Full implementation of building code reform
- The Maine Downtown Center
- Better visioning assistance and planning tools for towns
- Incentives for multi-municipal and region-scale planning

HOW TO PAY FOR IT

LODGING TAX

Three-point increase
(\$20 million per year)

MAINE GOVERNMENT EFFICIENCY COMMISSION

A bipartisan commission that will:

- Locate program savings of \$60 to \$100 million
- Propose reforms
- Send proposals to the legislature for an up or down vote

Savings will be invested in economic development activities and tax reduction

DEED TRANSACTION FEE

\$20 increase (\$5 to \$8 million per year)

THE STRATEGY:

SUPPORT THE REVITALIZATION OF MAINE'S TOWNS AND CITIES WHILE CHANNELING GROWTH

Finally, beyond stimulating the economy and making government more efficient, Maine needs to seek ways to allow its traditional hub towns to absorb more of the state's development even as it works to encourage towns and groups of towns to better manage growth across the broader landscape.

In short, Maine needs to tend to how its rules and policies shape communities.

The situation now is troublesome. Currently, existing regulations and under-utilized programs do little to promote investment in established centers (and may hinder it) while at the regional scale Maine's ineffective state-local land-use planning system too often fails to shape growth in the most

beneficial ways.

On the redevelopment side, several factors actually deter development in established centers. Maine's various building codes make redevelopment confusing and expensive. Current zoning laws prohibit the emergence of high-amenity, walkable neighborhoods that many residents desire. And reinvestment programs—initially set up to energize activity in traditional regional centers—remain under-funded and under-utilized.

On the planning side, meanwhile, growth management in Maine remains highly localized and quite weak. Despite the approval of hundreds of comprehensive plans at the town level, their actual implementation leaves much to be desired. And, of course, planning that reaches beyond town bound-

aries to address regional challenges remains virtually nonexistent.

What is needed, then, is clear: As Maine grows faster—nearly twice as fast as in the last decade—the state must make it more likely for its regional hubs and other established towns to absorb some of the state's coming growth even as it works to bolster planning at all levels of geography.

The state must make it more likely for its regional hubs and other established towns to absorb some of the state's coming growth even as it works to bolster planning at all levels of geography.

SUPPORT REDEVELOPMENT AND REVITALIZATION

Maine's first priority in tending to its communities must be to actively promote the revitalization and enhancement of its traditional towns and regional centers.

These towns are critical to Maine.

Where they are healthy and inviting, they burnish the Maine brand. When they welcome development, they hold out to Maine regions the land and existing infrastructure needed to at least in theory absorb significant portions of the coming housing demand. (See box below.)

And so the state of Maine should undertake at least three reforms aimed at encouraging the redevelopment of Maine's traditional regional centers. To that end, Maine should: Mandate the adoption of perfected model building codes; develop a model zoning code for traditional centers; and make better use of existing programs and organizations whose mandate is to revitalize Maine's traditional towns and cities.

CHAMPION THE STATE'S NEW MODEL BUILDING CODES AND WORK TOWARD UNIFORMITY

Maine's first strategy for promoting new investment in its established regional centers should be to streamline once-and-for-all the state's cluttered, confusing building-code regime and to make sure that its newly adopted model rehabilitation code is truly helpful and easy to use.

Today, Maine's lack of a uniform statewide building code seriously hinders redevelopment by injecting uncertainty into investors' decisionmaking, consuming time, and making clear guidance from a central source impossible to obtain. Likewise, until recently the lack of a state rehabilitation code has limited the reuse of the state's large and distinctive stock of historic buildings.

ROOM TO GROW: ACCOMMODATING RESIDENTIAL AND COMMERCIAL GROWTH IN MAINE'S TRADITIONAL CENTERS

Hoping that facilitating development and redevelopment within the state's traditional regional hubs, its so-called "service centers," might have a beneficial impact on Maine's sprawling development patterns is more than just wishful thinking. A recent analysis of selected cities and towns performed for this report shows that many regional centers have the capacity to absorb most or all of their regions' projected growth over the next 20 years. (To read the report please visit www.brookings.edu/metro/maine.)

The study, conducted by members of five regional planning commissions and councils of governments led by Robert Thompson of the Androscoggin Valley Council of Governments, used standardized projections of population, housing, and employment—applied to currently usable development stock and regulations governing undeveloped land—to determine the share of future regional growth that could be accommodated within the state's central towns.³¹ The general finding: Maine's regional hubs are far from "built-out" and hold out substantial capacity to absorb development that currently goes elsewhere. In fact, currently undeveloped land in regional centers—combined with existing regulations that allow and encourage denser in-fill and redevelopment projects—could absorb all or most of their regions' future residential,

commercial, and industrial growth in every one of the examined regions, from Sanford to Presque Isle and all those in between.

Lewiston-Auburn is a prime example. Within these two cities lie 12,185 acres of vacant and currently zoned residential land. Given current land consumption rates, and assuming a 10 to 30 percent reduction in acreage due to roads and other constraints, Lewiston and Auburn could accommodate at least 8,000 housing units—almost four times more units than the expected growth for the entire region over the next decade calls for. And the story is similar on the commercial side. Vacant industrial and commercial land, millions of square feet of vacant brick mill and industrial park space, and over 200,000 square feet of vacant office, industrial, and warehouse space found within the two centers could theoretically accommodate all of the region's 8,000 projected new jobs.

The bottom line: Maine's traditional regional centers—the perfect place in which to counter sprawl with "smart growth"—stand ready and able to absorb huge shares of the state's projected growth if only Maine can find ways to utilize them. ■





Happily, Maine has already started important work in reforming its tangled building code situation. In 2004, Maine passed legislation that adopted the International Building Code (IBC), a model building code published by the International Code Council (ICC) as the state building code, and required that henceforth any municipality that adopted or updated a building code must adopt the new model. In addition, the following year, the legislature adopted the International Existing Building Code (IEBC), a model building rehabilitation code to govern work on and in Maine's existing buildings. The rehab code offers consistency in code requirements that will make renovation projects more predictable and less expensive to accomplish, without compromising safety. Adopting the model rehab code represented an important step toward making development in traditional regional centers and other older places more competitive with new construction in the suburbs.

While these steps represent important progress, more needs to be done to rectify decades of code chaos.

Currently, the use of the IBC, the state's model building code, remains optional: Nothing requires municipalities that already have a building code to switch to the new state model. Nor is there a requirement that municipalities with no building code now adopt one. Neither, for that matter, is the rehab code mandatory. The current statute simply requires that any municipality wishing to adopt a rehab code adopt the IEBC, the model code adopted by the state. The upshot of all of this is that much code variation and confusion persists in Maine and will persist for years.

In view of these issues, Maine should step up its financial

support for broader implementation of its model codes and move toward making that implementation uniform and ubiquitous.

Step up financial support to perfect the model codes.

To start with, the state should expedite its efforts to make sure the new model code is as easy to implement as possible.

Currently, the model building code statute names the IBC as the model building code, but delineates eight areas where municipalities are directed to use other existing state laws. This can get confusing. For example, the existing fire or elevator codes take precedent over any related areas in the IBC. That means that for new construction, the IBC might require railings of a certain height, but the National Fire Protection Agency (NFPA) fire codes that the state uses to regulate fire safety might require a different height. These differences need to be identified, clarified, and harmonized for ease of implementation. (The issue is even more complicated for those using the rehab code.)

And there are other glitches. For instance, early work by the state and code enforcement workers suggests there may be places where the IBC needs to be tweaked to better meet the needs of Maine's environment. For example, the IBC does not establish a heavy enough snow load for most of Maine. Because of Northern Maine's heavy snow fall, the IBC should probably be amended to meet the realities of Maine's climate.

All of which underscores the importance of the state's ongoing but unfunded work to harmonize the IBC with the eight existing relevant laws. This work will not only help by committing code requirements to one document, but ensure the codes work in the Maine environment in all ways. This bridging work is critical if the state is going to offer municipalities a "hassle-free" off-the-shelf product that can be immediately adopted and that will truly save builders money by reducing the delays and conflicts caused by unclear code issues. For that reason, the state should ensure the work continues and speed it by funding it appropriately.

Fund technical assistance, model-code training, and public outreach. The legislature also needs to back a concerted effort to market and implement the newly adopted model codes. Currently, no funding exists to supply technical assistance to municipalities adopting the new codes. No training programs exist to train code-enforcement officials in the streamlined regulations. And for that matter, there is not even a centralized database of what municipalities employ which codes to speed planning decisions. Consequently,

municipalities are in effect being left on their own to work through code adoption, interpretation, and enforcement without even the support of a public outreach program that explains the benefits of adopting the model codes and would help boost adoption. This makes no sense. Promulgation of the new model codes offers a huge opportunity for Maine. The state should do the job right.

Achieve code uniformity in the near future. Beyond simply developing and marketing a comprehensive new code, the legislature and the governor need to actively move the state much closer to the ideal of statewide code uniformity.

How might this be achieved? One approach might be to simply require that all existing codes in the state (elevator and fire, in particular) be migrated to those published by the International Code Council. This way, both the model codes and all the other fire and construction codes in use within the state would derive from the same code family, thus creating a much higher level of standardization that would greatly reduce conflict and confusion and would increase predictability and uniformity. A problem with this approach, however, remains the strong investment of the state Fire Marshal in retaining the NFPA fire safety code.

This suggests another possible approach. Working more within the current framework, reformers could embrace the mixed model code now being reviewed, but move much more concertedly to promote its state-wide adoption. To that end, Maine could require that within a reasonable number of years that all towns that have or wish to have a building code adopt the state's model codes. Currently, adoption of the updated codes is mostly voluntary. The only mandate is that localities that want a building code but do not yet have one must adopt the state model codes. That means that code variety will persist in Maine for many years. However, by expanding the code adoption mandate to require every municipality that has—or wishes to have—a building code to adopt the model building and rehab codes, Maine will almost entirely eliminate the confusion. Finally, then, the vast majority of the state's towns would at last be in a position to make new construction and rehab work more predictable, more efficient, and cheaper. As to the mechanics of making it happen, one final note is in order. The legislature should not require local adoption of the model codes without making funds available to municipalities

to do so. Accordingly, perhaps \$1.5 million in matching funds should be made available to help towns hire additional code enforcement officials to help implement the adoption of the model codes. This initiative could easily be supported by disbursements from the Maine Quality Places Fund.

Bolster the new rehabilitation code. Finally, there remains work to do in providing the state a truly useful renovation and rehabilitation code. To be sure, the state has already adopted a building code for existing structures, which is an enormous first step. However, Maine has a lot more to do to make its rehab code truly functional and meaningful.

Because of the way the law is written, existing fire codes, elevator codes, ADA regulations, and other codes trump what is in the IEBC. While this is not necessarily an issue for new construction, it can pose problems for work on existing structures. For example, the fire and elevator code requirements can make rehabbing an old building economically unviable.

Today, Maine's lack of a uniform statewide building code seriously hinders redevelopment by injecting uncertainty into investors' decisionmaking.

Facing the same situation, New Jersey pioneered the country's first building code for existing structures. (See box on next page.) Its main tenet is one of incrementalism—the larger the project, the more of the building is required to be up to new construction standards. The inverse is also true—the smaller the project, the less is required. This basic approach is included in the IEBC.

To make this incremental approach truly effective, the state will need to work through any conflicts between the IEBC and the existing fire code and elevator codes. New Jersey chose to create a committee of “interested parties,” including fire code officials, building code officials, developers, downtown redevelopment organizations, advocates for people with disabilities, and historic preservationists to work through these issues together. Maine should follow suit.

REMOVING A REDEVELOPMENT BARRIER: NEW JERSEY'S REHABILITATION SUBCODE

The state of New Jersey pioneered in the development of building codes for existing buildings, and the work has paid off.

In the mid-1990s, developers, government officials, and planners realized that New Jersey's building code worked against redevelopment because the code was written for new construction and made rehab projects very difficult.

Before 1998, when New Jersey adopted its rehabilitation subcode, the state required that if a proposed rehab project cost 50 percent or more of the cost of totally replacing the building, then the rehab project had to be brought fully up to current code. This significantly thwarted redevelopment in New Jersey's cities—home to most of the state's older building stock. Bringing an old building up to code often meant having to replace a 28-inch-wide door with a code-required 32-inch-wide door. This did little to improve safety, yet wreaked havoc on rehabilitation project budgets.

To address this issue, the New Jersey Department of Community Affairs in partnership with Rutgers University developed the nation's first building code designed for existing structures. The new rehab subcode abandoned the emphasis on project cost, and instead enumerated six kinds of projects: repair, renovation, alteration, reconstruction, change of use, and addition with "repair" being the smallest intervention. This allows smaller projects to occur without forcing them to comply with new construction standards.

The resulting impact on central-city revitalization has been remarkable.

In 1998, the first year of the new subcode, rehabilitation work in Jersey City grew by 84 percent, in Newark by 60 percent and Trenton by 40 percent compared to a modest 8 percent state wide. Work on existing structures totaled \$363 million in 1997, \$511 million in 1998, and \$590 million in 1999.³²

A recent multivariate analysis in the *Journal of the American Planning Association* shows that on average, New Jersey had 116 more rehab permits per jurisdiction after the implementation of the subcode than in neighboring states without a rehabilitation subcode.³³ And in "Turning Around Downtown," the Brookings downtown expert Chris Leinberger estimates that adopting a New Jersey-style rehab subcode can cut costs of historic rehabilitation up to 50 percent.³⁴ ■

For more information: See www.state.nj.us/dca/codes/rehab/

PROMOTE ZONING THAT ADDS TO MAINE'S WEALTH OF DISTINCTIVE, TRADITIONAL NEIGHBORHOODS

Part of what makes Maine "Maine" is its wealth of unique, walkable older communities. And yet, even within those traditional hubs much of the state's current land-use zoning institutionalizes suburban-style development of the kind that can be found anywhere. What Maine needs, therefore, is new model zoning that is specifically designed to enhance rather than swamp its unique traditional communities.

Currently, building new walkable, dense, mixed-use neighborhoods in towns and villages is the exception rather than the rule. In most communities, in fact, the local zoning code contains numerous requirements that actually preclude traditional development. Excessive parking requirements, large lot sizes, and single-use zoning all result in suburban-style, often higher-end development designed more for cars than people.

New zoning approaches, by contrast, can help Maine hold onto its precious quality of place. And they can help expand it: Within the boundaries of Maine's older towns, there remains lots of open space. Shouldn't that space be treated specially, as befits its frequent proximity to one of Maine's numerous historic town or village centers, instead of zoned as if it were situated in suburban anytown? Of course it should be. And so Maine should become a leading disseminator among states of innovative new-old zoning models that can help its traditional cities and established towns expand on what distinguishes them from their suburban counterparts and contribute even more to Maine's treasured brand. To this end, the state should:



BETTER FUND AND USE EXISTING REVITALIZATION AND REDEVELOPMENT-ORIENTED PROGRAMS AND ORGANIZATIONS

A final agenda for ensuring Maine's regional centers absorb more of the state's future growth is to make much better use of existing revitalization programs, several of which are severely underutilized. Three such programs are the Municipal Investment Trust Fund (MITF), the Maine Downtown Center (MDC), and the state's historic preservation tax credit.

In each case Maine should move to make sure each of these currently hobbled but potentially transformative programs can expand and better stimulate the revitalization of traditional Maine. Accordingly, the legislature should:

Fully fund the Municipal Investment Trust Fund (MITF). The MITF has never been adequately capitalized and so Maine should move to recharge the fund with \$90 million over 10 years from the proposed new Maine Quality Places Fund. This infusion of capital will transform a sound but limited program into a major source of catalytic investment grants to the sort of infrastructure projects—riverfront walks, sidewalks, parking garages, and site preparation—that can jump-start major redevelopment in Maine's established regional centers.

Support the Maine Downtown Center (MDC). MDC has also been woefully underfunded, especially when compared to counterparts in other rural states. Consequently, the center should be funded with \$300,000 annually, as it had requested in the last budget round (which resulted instead in funding of \$75,000 per year). The Governor's Council on the Creative Economy has also recommended \$300,000 annually, which is near the national average. The goal of this funding should be to double the number of Maine Street Maine communities from eight to 16 by 2008 and to triple the number to 24 by 2010.

Create a new generation of model zoning and provide it as a tool to municipalities. The current state of zoning in Maine favors suburban or suburban-style development. The state of Maine, given this, needs to help develop and promote a different sort of development within its regional centers or established towns that will not be at odds with the state's historic, densely-built, mixed-use older communities.

Often described as "form-based" zoning, this new direction in zoning is less concerned with delineating allowable land and building uses, and more focused on how buildings, blocks, and streets relate to each other. This helps keep the historic fabric of a town and village intact, or allows for expanding it.³⁵ Form-based zoning often forgoes parking requirements, assuming that the developer, business owner, and bank know best what makes market sense. Form-based zoning also differs from suburban-style zoning in that suburban-style zoning often means buildings are financed and built for a single use, whereas in form-based zoning, buildings tend to be built with flexibility in mind. As Chris Leinberger explains of suburban-style zoning, "You will always know a building was built for a McDonald's even if it is now a Chinese takeout."³⁶ But with form-based zoning, as with a traditional downtown, a building could have many uses, both simultaneously and over time, without the exterior changing. In other words, it could start out as a hardware store with apartments above, but end up as a restaurant with offices or a hotel above. So let Maine become a leader: The state should create a series of model zoning solutions that encapsulates all of these principles and is available for municipalities—especially regional hubs—to tailor and adopt. Many other cities and communities have developed zoning along these lines; for few does it hold out such large boons as it does for Maine towns.

Improve the Historic Preservation Tax Credit. Maine should also enhance the state's underutilized state historic preservation tax credit to make it a better tool for encouraging reinvestment and rehab in traditional towns and downtowns. Two adjustments are needed:

Make the credit transferable. To start with, Maine should make its historic tax credit easily transferred from one party to another. After all, the state tax credit is only valuable if the tax-paying entity has a large enough tax liability in the state that the credit will make a difference. However, many states have developed ways to make sure the full value of the credit is captured even if a partner in a project has little or no tax liability. These adjustments range from allowing the tax payer to sell the credit to another entity as allowed in Rhode Island and Missouri to offering a refund for unused portions of the credit as they do in Maryland. And so Maine should follow Rhode Island's lead and allow the taxpayer receiving the credit to sell it to a third party. This would allow the tax payer to raise capital for projects and in that way capture more of the value of the credit they are eligible for. The state could also opt to allow the taxpayer to make a "disproportionate distribution." This would allow a local tax payer to partner with a national corporation. The local tax payer would receive all of the state tax credit, while the national corporation, which is not eligible to receive the state credit, would receive all of the federal credit.

One note, however: In order to enable transferability, the state tax credit needs to be decoupled from the federal credit. So it should be. Such a change will allow the state to make the changes in its tax credit program needed to make both the state and federal credits more attractive, and so to increase their use as Missouri's experience says it will. When Missouri instituted its successful state credit, the number of projects using the federal credit doubled.³⁷

Remove the individual taxpayer cap. In addition, the state needs to allow individual taxpayers greater use of the credit. Currently, Maine's rehabilitation tax credit has a \$100,000 per taxpayer cap on projects. Even though the rehab credit is listed as 20 percent of the cost of the project, most commercial projects (the only kind of rehab project currently eligible for the state credit) see a much smaller percent credit due to the low cap. For example, if the rehab costs \$1 million, the taxpayer would only receive a \$100,000 credit, which is 10 percent of the cost of the work. Given that, Maine should remove the individual taxpayer cap and refrain from any other kind of cap on the state rehab credit. As the National Trust for Historic Preservation describes, "Those states that have resisted capping have had an economic advantage in attracting capital for historic preservation."³⁸ As the example of Rhode Island shows, offering a credit that is large enough to incentivize investment in redevelopment can more than make up for any initial cost to the state.

The state should do everything it can to bolster its historic preservation tax credit and make it the truly transformative tool it can be in a state like Maine.

In sum, the state should do everything it can to bolster its historic preservation tax credit and make it the truly transformative tool it can be in a state like Maine. As many studies have shown, enlarging these tax credits and making them easier to use typically pays for itself. In Missouri, for example, the state's average investment of \$25 million per year in historic preservation tax credits brings in \$70 million in tax revenue, including \$30 million in state and local taxes.³⁹

IMPROVE LOCAL AND REGIONAL PLANNING CAPACITY

But Maine needs to do more to improve its communities. Along with working harder to promote reinvestment, the state must greatly strengthen the state-local planning system to ensure that the future revitalization of its town centers and other growth areas is not swamped by chaotic suburbanization everywhere else.

In this respect, the need is glaring: Maine towns and regions need to be significantly empowered to manage the vast region-scale forces of retailing, commuting, and the housing market now overwhelming them with wrenching land-use changes and onerous service and spending requirements. What is more, this need will only sharpen as time goes on, as the prospect of faster growth raises the likelihood of much, much more sprawl.

On this front, the state's Growth Management Act—enacted in 1988—provides a respectable base on which to build a push toward more effective planning. Intended to make quality planning a common practice around the state, the act requires the development of comprehensive plans by all towns that wish to enact zoning, rate of growth ordinances, or impact fee ordinances. Over time, the act's existence has led to the preparation of 250 comprehensive plans, the awarding of 379 grants, and greater public awareness of the need for sound planning.⁴⁰

But the GMA falls short on several fronts, as acknowledged a year-long evaluation of the act recently completed by the state in partnership with hundreds of participants.⁴¹ Over the years financial and technical assistance to towns often resulted in good comprehensive plans but weak implementation efforts. Likewise, the state lacks the ability to push for effective Future Land Use Plans or to ensure zoning ordinances are consistent with comprehensive plans, meaning much Maine planning lacks binding force. And then, no state policies require—or even encourage—land use planning at the regional level.

To address these faults, Maine should provide a suite of supports and incentives designed to significantly improve the effectiveness of planning at the local level and usher in robust, multi-municipal planning at the regional level.



SUPPORT HIGHER QUALITY PLANNING AT THE TOWN LEVEL

Planning begins at home, with the people of each town. Unfortunately, many towns remain unprepared for the challenge of sprawl. Many towns lack the resources, consultants, and other professionals they need to develop a top-quality comprehensive plan to manage growth and other issues. Even those towns that do have solid comp plans often lack the resources and expertise they need to develop ordinances and zoning language that reflects their priorities. Moreover, at any point disagreement and conflict, combined with inadequate public participation, can render even the best planning processes moot. Maine should therefore move to address these deficits and improve the prospects for quality planning by providing to towns and regions the resources and tools they need to facilitate broader-based, better-informed planning processes and wider implementation of quality plans. To do that it should:

Provide to regions and towns the resources they need to secure top-quality visioning and conflict-resolution services as well as state-of-the-art GIS visualization tools and consulting. Maine should begin the work of improving planning in the state by making widely available to Maine towns and regions new resources for helping citizens find consensus on how they wish to grow. Additional assistance should help localities implement their vision with ordinances.

Help from the state should support every phase of the planning and zoning process. Some resources should be made available to allow towns to secure expert help in visualizing future growth scenarios. Other grants could be used by towns to hire facilitators and experts at consensus-building—assistance that will greatly improve citizens’ ability to weigh possible futures and reach consensus about possible responses.

To ensure enough trained professionals are available, meanwhile, the state should also support the provision through the state’s regional planning agencies (RPAs) and other organizations of a much wider range of visioning, consensus-building, and conflict-resolution services for towns. Trained facilitators, for example, should become widely available to support visioning, planning, and ordinance writing efforts. So, too, should GIS applications and other web-based planning tools be made easily accessible to help citizens and municipal leaders understand policy options and design a comprehensive plan. Finally, additional grants should help towns retain the requisite consultants and other professionals needed to help them develop local regulations that reflect their vision.

As to funding the new supports, let Maine establish a new Maine Community Enhancement Fund—financed by a reasonable increase on deed transaction fees—to underwrite these and other planning initiatives. Such a fee could generate \$5–8 million a year in new money for fostering local and regional planning, only a fraction of which would be needed to generously support towns as they begin to plan.



FOSTER COLLABORATIVE AND REGIONAL PLANNING

Improving local implementation is an important first-step in re-energizing planning throughout the state. However, if sprawl is ever to be tamed, growth will also need to be managed across town boundaries, meaning that groups of towns—or, better, the towns making up whole regions—will need to plan together. Only then will groups of Mainers working together be able to recognize and address the housing, development, or traffic problems that transcend their borders and respond to them in ways that truly improve their individual towns.

For that reason, Maine must stimulate more towns and even whole regions to plan together.

Unfortunately, Maine communities have shown little propensity to undertake such work in part because few strong incentives for it exist. To be sure, towns that wish to cooperate on planning or service delivery may compete for modest grants from the new Fund for the Efficient Delivery of Local and Regional Services, but aside from that, few strong incentives exist for municipalities to work on planning beyond their own borders. Nor does the state’s support of regional planning agencies stimulate much regional planning, as the funding provided to the agencies is used primarily to offer technical assistance to towns developing or updating their own individual comprehensive plans.

So: To end years of neglect of regional planning, the state should launch a significant initiative to provide a set of meaningful incentives to towns that choose to manage growth on a larger scale.

Encourage planning at the multi-municipal level.

Planning among towns can widen the reach of growth management, so Maine should aggressively promote it. To do so, significant grants from the new Community Enhancement Fund should be awarded on a competitive basis to groups of towns working to plan together, with priority given to multi-municipal plans that have the greatest potential of transforming regional development dynamics to meet regional growth and conservation desires. Participation could include as little as two towns or as many as an entire transportation corridor.

One example of such multi-municipal planning is the state's Gateway 1 project, a collaborative planning effort that seeks to integrate social, economic, and cultural concerns with transportation improvements along the Route 1 corridor. While the program is voluntary, a memorandum of understanding holds together the municipalities and participating state agencies and outlines the roles and responsibilities of all stakeholders in the planning and implementation process.⁴² All 21 towns within the corridor, the Maine Department of

Transportation, the SPO, and the U.S. Federal Highway Administration have now agreed to the MOU.

Stimulate region-wide planning across the state's labor markets or other appropriate regions. But Maine should go further. Maine's ultimate goal with respect to growth management should be to stimulate planning at the scale of the state's labor market areas (LMAs), or other appropriate regional geographies. LMAs and other geographies represent the true scale at which families make housing and employment decisions. And yet, no programs currently exist to foster planning at this level. To remedy this, the state should aggressively promote robust planning at the regional scale by offering special grants or other incentives to LMA-scale consortia of towns that work together to develop "Growth and Conservation Plans"—plans that simultaneously address growth, development, and land conservation within the region.

CORRIDOR-SCALE LAND USE AND TRANSPORTATION PLANNING: MAINE'S GATEWAY 1 PROJECT ALONG ROUTE 1

The Gateway 1 project along Maine's famous Route 1 points the way toward meaningful, voluntary, consensus-driven regional planning. Begun in 2004, the project attempts to better manage growth throughout the sprawling corridor by involving municipalities and several state and federal agencies in a continuing, long-term discussion about their shared future.

But the process is more than just a discussion. Twenty-one towns, Maine DOT, the FWHA, and SPO—bound by a memorandum of understanding—have all accepted responsibilities to participate in a comprehensive planning process and act on the resulting strategic regional land use and transportation plan.

Under the terms of the memorandum, participating state and federal agencies will be expected to incorporate discussions and recommendations of the project's 21-town steering committee into their planning and transportation investment decisions about matters such as the geography of new development and the location of transportation projects. This will give residents of the region significantly more say in how and where regional transportation projects take shape and provide the agencies with better information to make such investment decisions.

For their part, participating towns are being asked to weigh regional considerations in their decisionmaking. Upon the completion of the strategic plan, the Gateway 1 protocol requires towns to consider incorporating the plan's requirements into their existing comprehensive plans.

Any new zoning ordinances would then have to comply with the revised comprehensive plan. To improve the chances of compliance, Maine DOT envisions entering into state-local agreements that tie state transportation investments to local land use commitments. Additional incentives like reduced local match requirements, transportation planning assistance, increases in local road assistance reimbursements, and bonus points for Maine DOT-funded projects are also being considered to further increase the chance of local compliance.

Though still in the first planning phase, Gateway 1 is already showing positive results. Maine DOT's actions in a number of towns—involving traffic-calming, better signage, and shoulder widening—addressed some of the region's high priority concerns identified in the project's early stages. Such attentiveness by the project's key state player is stimulating participation and buy-in among the 21 towns. For instance, some towns are already using data collected and disseminated by Maine DOT during this process for incorporation into their comprehensive plans.

While the true test of implementation is still two years away, the frequent and high-level collaboration among towns and agencies within the corridor represents the state's largest-ever regional planning effort and a major step toward more effective land-use management. ■

For more information: See www.gateway1.org

To begin with, groups of municipalities that formally agree to undertake a region-scale Growth and Conservation Plan—through memoranda of understanding—should be made eligible for grants to pursue their collaborative efforts from the new Community Enhancement Fund grant program, funded through deed transaction fees. Additional funding ought then be made available to regional collaboratives to support the completion of regional plans that contain a combination of growth management and conservation planning and include a Future Land Use Plan that incorporates economic development, housing, transportation, capital investment, and open space needs and desires of the region. Still more assistance could be provided to communities within the region that choose to adopt the regional plan as non-binding guidance for their own local plan and land use codes. In this fashion, Maine would go a long way toward stimulating voluntary action at the regional scale—the scale at which the state’s growth-related problems and solutions reside.

Encourage even bolder action at the regional scale by offering strong incentives for towns to adhere to regional growth-management plans.

Yet Maine towns and regions will ultimately need to go even farther in collaborating to curb chaotic, region-scale sprawl. Specifically, Maine towns need to begin committing to truly regional planning and zoning areas—areas the state should help create with a catalytic tax incentive.

In this respect, the state need not and should not mandate region-scale planning. Instead, the legislature and state agencies should put in place meaningful new incentives for towns to implement the terms of high-quality land-use plans designed to manage growth across whole labor markets. Two approaches merit consideration:



AFFORDABLE HOUSING: LETTING THE MARKET WORK FOR MAINE FAMILIES

Another critical issue related to the state’s redevelopment and planning policies is affordable housing. Without a sufficient array of affordable housing options within reach of Maine families of all income levels, even the best-laid land use plans will be trumped by sprawling development as households make the rational economic decision to move farther and farther away in search of affordable homes. For that reason, significantly increasing the supply of affordable housing of all sorts must be a key aspect of the state’s efforts to craft a sustainable prosperity and safeguard its quality of place.

But standing in the way of a larger stock of affordable housing is the state’s complex array of local regulations, codes, and processes that inhibits the construction and rehabilitation of affordable housing of all types. Although federal law requires municipalities that receive block grant funding to identify and ameliorate local regulatory barriers to affordable housing as part of their comprehensive plans, there are no consequences if a local government fails to act.⁴³ And indeed, a 2003 report by the Community Preservation Advisory Committee (CPAC) identified a variety of such regulatory barriers in Maine, including growth caps, permit and impact fees, lengthy review processes, large-lot zoning, and prohibitions on certain types of housing units, among others.⁴⁴

Across the state, these barriers effectively prevent the market from providing the kinds of housing demanded by individuals and families. Whether cities and towns disallow accessory apartments or mandate

minimum lot sizes, the result is the same: fewer choices for families, and more expensive ones at that.

To break down the state’s affordable housing barriers, then, Maine should induce local reform through sizeable incentives. First, the state should make the dispersal of various funds—including grants from Land for Maine’s Future, the Municipal Investment Trust Fund, and the proposed Maine Quality Places Fund—conditional on towns’ implementation of specific reforms, including the passage of an inclusionary zoning ordinance and the exemption of affordable housing development from growth caps and impact fees.⁴⁵ Alternatively, grants could be results-based, contingent on the actual production or preservation of a target number of units. Moreover, accommodating a sufficient supply of affordable housing must be made a part of any regional planning efforts pursued by towns. The state should serve as a resource in these processes by developing and disseminating various models that municipalities could implement in order to secure compliance with grant requirements.

Without careful attention to Maine’s affordable housing problem, families will increasingly be forced to choose between spending larger shares of their income on housing or moving longer distances away. Either choice harms the Maine economy by either leaving households with less disposable income or by fueling sprawl and its many associated costs. ■

Tie key state grants and aid flows to the adoption of regional plans. One strategy for promoting wider-angle planning would simply be to link the funding and investment decisions of existing state programs to stipulations of local and regional planning commitments.

This is not a new idea in Maine—some programs and state statutes already give priority treatment to localities based on their adherence to better planning principles. LMF, for instance, favors proposals that mesh with demonstrated local smart growth initiatives. And the Maine Department of Transportation is currently exploring making at least a portion of its transportation investments contingent on the existence of quality local or corridor-scale land use plans.

Linking regional planning with existing state project funding requires two key components. First, priority in funding decisions by state programs must be given to towns that amend their local comprehensive plans to make them consistent with a regional, or LMA-scale plan. Second, the incentive—whether it's priority consideration for LMF funding or a capital investment by a state agency—must be large enough to induce towns to commit to a regional plan. And the state ought to be pro-active in promoting the embrace of regional planning. With these two conditions met, the state should also provide sufficient grant money from the Community Enhancement Fund for towns to develop their regional plans.

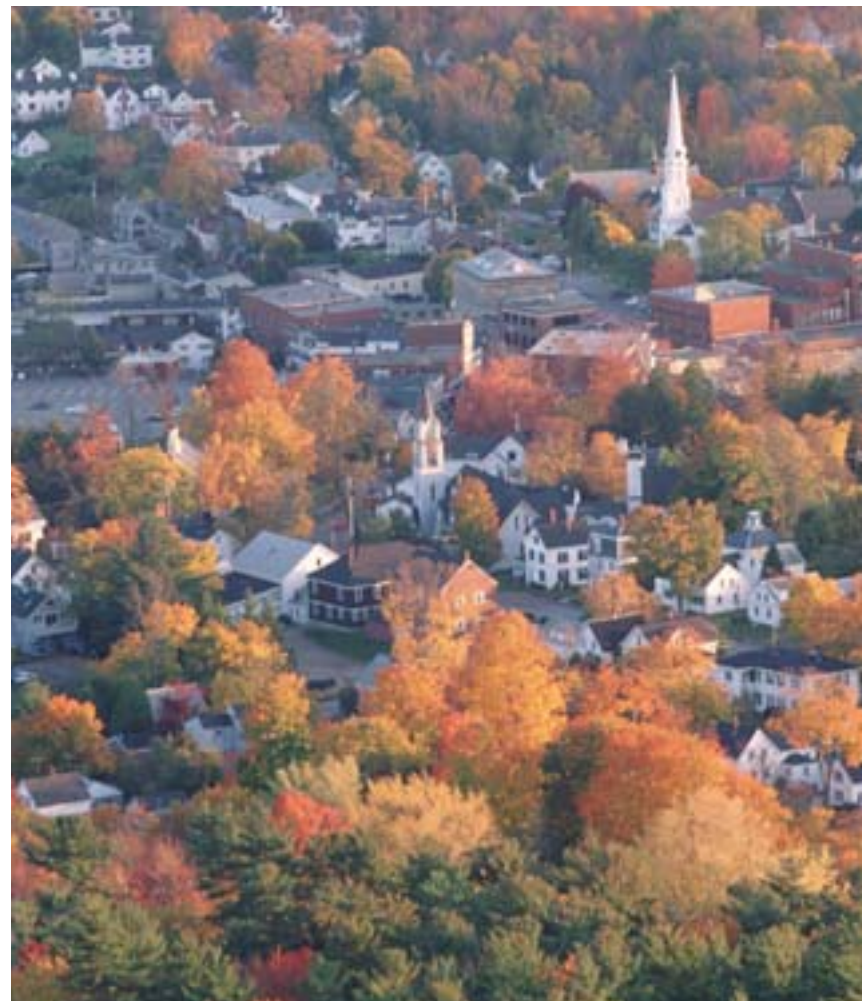
Offer a local-option sales tax to towns that implement regional plans. Alternatively, Maine could provide a major new incentive: The legislature could make available the ability to levy a one-cent local-option sales tax to all municipalities that fully commit to a truly regional plan—one that incorporates development, land conservation, and affordable housing. To avail themselves of that inducement, a minimum number of towns within an LMA, or similar regional unit, would need to collaborate on the preparation of a development and conservation plan for the region, which would be reviewed by a panel of municipal and state representatives against a set of criteria clearly defined by the state. Grants from the Community Enhancement Fund grant program could be enlisted to support the plan's development. Once a regional plan was completed, the region's towns would go about revising their local comprehensive plans to align with the regional plan. Successful alignment of the towns' local zoning ordinances with the regional conception would then

trigger the ability of the towns to enact by referendum the special-option sales tax.

As to towns' use of the new revenue, it could be two-fold. Half of the revenue from the new levy generated within a

The legislature and state agencies should put in place meaningful new incentives for towns to implement the terms of high-quality land-use plans designed to manage growth across whole labor markets.

given town could be used by the town as it pleased while the other half might be pooled within the LMA and distributed to all participating towns on a per-capita basis. That would ensure that all towns would profit from the collaboration—gaining both greater mastery over regional development trends and needed revenue. ■



VI. CONCLUSION

In the end, this report concludes that Maine can flourish—if it acts boldly at this critical juncture.

True: There is nothing inevitable about the realization of a new era of sustainable prosperity in Maine.

Clearly the state faces well-known and intractable challenges, including its cold winters, relative remoteness, and relatively small economy. Moreover, this report underscores the threats to Maine's emergence posed by its ill-focused spending, the vulnerability of its industrial clusters, and ill-managed suburban sprawl.

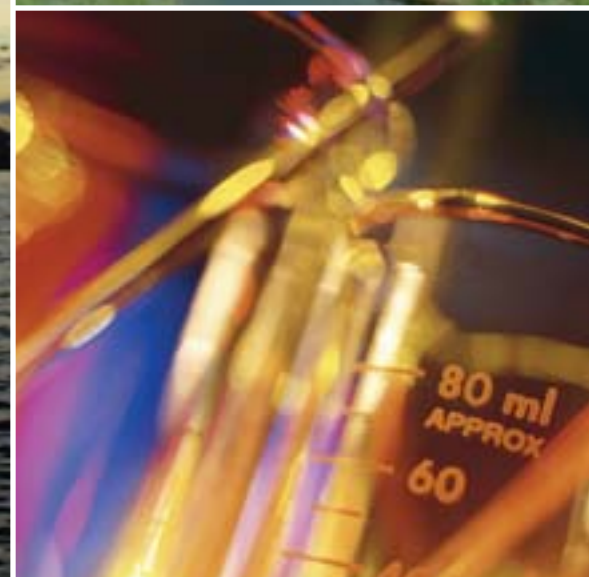
And yet, not even a review of the sizable state-level policy problems facing the state can obscure its tremendous physical and human potential.

As its world-famous brand declares, Maine has—in its vivid small towns and waterfronts, its lakes and fields and rocky coastline—exactly the sort of authenticity and quality of place that can set a place apart. Maine is unforgettable and distinctive, and that matters.

But even more encouraging are the other aspects of Maine's brand: its human dimensions. With Yankee ingenuity and the town meeting each part of its mystique, the most important among all of Maine's advantages in the coming years will be its knack for community-spirited problem solving. Maine will need to innovate if it is to invest adequately in constructing sustainable prosperity, slim government to make that possible, and devise a Maine style for effectively managing development. To do that, it will need to summon all of the state's genius for coming together to work out clever solutions to tough problems.

And that is why this report is ultimately optimistic about Maine's ability to take the actions it needs to take to usher in a more prosperous, sustainable, and ultimately more equitable future.

Maine's rooted, committed citizens—who love their state—have a talent for figuring things out. They've done it repeatedly in the past. We believe they will do it again, when it matters most. ■



Maine's rooted, committed citizens—who love their state—have a talent for figuring things out. They've done it in the past. We believe they will do it again.



ENDNOTES

I. INTRODUCTION (Pages 14–19)

1. Richard Barringer, “Maine Transformed: An Introduction.” In Richard Barringer, ed. *Changing Maine: 1960–2010* (Gardiner: Tilbury House, 2004).
2. In his essay, “Maine Transformed,” Richard Barringer traces the rise of the concept of “sustainability” beginning with the work of the economist Herman Daly, continuing through the 1987 report of the United Nations’ World Commission on the Environment and Development, and proceeding through resolutions of the G-7 and the International Chamber of Commerce.
3. The 63 regional hubs include Ashland, Auburn, Augusta, Bangor, Bar Harbor, Bath, Belfast, Bethel, Biddeford, Blue Hill, Boothbay Harbor, Brewer, Bridgton, Brunswick, Bucksport, Calais, Camden, Caribou, Damariscotta, Dexter, Dover-Foxcroft, Eastport, Ellsworth, Fairfield, Farmingdale, Farmington, Fort Kent, Freeport, Greenville, Guilford, Houlton, Jackman, Kittery, Lewiston, Limestone, Lincoln, Lubec, Machias, Madawaska, Milbridge, Millinocket, Newport, Norway, Orono, Oxford, Paris, Pittsfield, Portland, Presque Isle, Rangeley, Rockland, Rockport, Rumford, Saco, Sanford, Scarborough, Skowhegan, South Portland, Southwest Harbor, Thomaston, Van Buren, Waterville, Westbrook.
4. For a complete definition of “service centers,” see Task Force on Service Center Communities, “Reviving Service Centers” (Augusta: Maine State Planning Office, 1998). Available at www.maine.gov/spo/landuse/pubs/svccenters.php. For an overview of the importance of these places, see John Melrose, “Revitalizing Maine’s Service Centers.” *Maine Policy Review* 12 (3) (2003): 48–55. Available at www.umaine.edu/mcsc/MPR/Vol12No3/5melrose9C.pdf.

II. EMERGING TRENDS IN MAINE (Pages 20–49)

1. U.S. Census Bureau American Community Survey, 2005.
2. Ibid.
3. Brookings analysis of data from the Population Division of the U.S. Census Bureau.
4. Ibid.

5. U.S. Census Bureau. “Domestic Net Migration in the United States: 2000 to 2004” (U.S. Department of Commerce, 2006).
6. Internal Revenue Service county-to-county migration data from 1995 to 2004 were used to calculate flows between counties, regions, and states.
7. The seven Boston metro counties include Essex, Middlesex, Norfolk, Suffolk, Plymouth, Rockingham (NH), and Strafford (NH).
8. Average household incomes are adjusted to 2004 dollars and are calculated by dividing aggregate income of the migrating households by the number of migrating households for the years 1999 to 2004.
9. In fact, the 2004 microdata, which contain estimates with relatively large variation due to the smaller samples size, suggest nearly 25,000 net migrants between the ages of 25 and 44 and over 13,000 under the age of 25 moved into Maine from 2001 to 2004. Over the same period, the data show a net gain of over 6,500 people age 45 and older.
10. Brookings analysis of housing price data provided by the Maine State Housing Authority.
11. Percent increase in price for Southern and Mid-Coast Maine coastal towns was calculated using weighted average median prices. Weights were determined by the number of housing units in each town.
12. Domestic Strategy Group, “Grow Faster Together. Or Grow Slowly Apart” (Washington: Aspen Institute, 2003).
13. Bureau of Economic Analysis, Regional Economic Information System.
14. Bureau of Labor Statistics Quarterly Census of Employment and Wages data.
15. Bureau of Economic Analysis, Regional Economic Information System.
16. Curtis S. Dubay, and Scott A. Hodge, “State Business Tax Climate Index” (Washington: The Tax Foundation, 2006).
17. Corporation for Enterprise Development, “Development Report Card for the States” (Washington: Corporation for Enterprise Development, 2006). Available at www.cfed.org/focus.m?parentid=34&siteid=1581&id=1581.

18. Bureau of Labor Statistics Quarterly Census of Employment and Wages data.
19. Bureau of Labor Statistics.
20. Milken Institute, “2005 Cost-of-Doing-Business Index.” Available at www.milkeninstitute.org/research/research.taf?cat=indexes&function=detail&ID=26&type=CDB.
21. KPMG, “Competitive Alternatives: KPMG’s Guide to International Business Costs” (2006). Available at www.competitivealternatives.com/.
22. Bureau of Labor Statistics.
23. Federal Reserve Bank of Boston, “In the Shadows of the National Recovery: An Overview of New England’s Economic Performance in 2005” (Boston: New England Public Policy Center, 2006). Available at www.bos.frb.org/economic/nee/articles/overview/oview05.pdf.
24. U.S. Census Bureau American Community Survey.
25. Bureau of Economic Analysis Local Area Personal Income data.
26. Maine Department of Labor, “Trends and Implications for the Maine Workforce” (Augusta, 2005).
27. Edmund Cervone, “State of Working Maine, 2005” (Augusta: Maine Center for Economic Policy, 2005).
28. Bureau of Labor Statistics.
29. Brookings analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages data.
30. Ibid.
31. Laurie Lachance, “Maine’s Investment Imperative” (Augusta: Maine Development Foundation, 2002). Available at www.mdf.org/mdf/speeches/InvestImper5.pdf.
32. Brookings analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages data.
33. Ibid.
34. Brookings analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages data; Bureau of the Census, Local Employment Dynamics, 2004 (Washington: Bureau of the Census, 2006).
35. Brookings analysis of Bureau of Economic Analysis Gross State Product data.
36. Brookings analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages data.

37. Ibid.
38. Ibid.
39. Bureau of Economic Analysis.
40. Ibid.
41. U.S. Census Bureau.
42. Bureau of Labor Statistics.
43. Bureau of Economic Analysis.
44. Michael E. Porter, "The Competitive Advantage of Nations," *Harvard Business Review* 90: 73–91; and Charles Colgan and others, "Assessing Maine's Technology Clusters" (Augusta: Maine Science and Technology Foundation, 2002).
45. Joseph Cortright, "Making Sense of Clusters: Regional Competitiveness and Economic Development" (Washington: Brookings Institution, 2006).
46. Cluster employment numbers are calculated from Bureau of Labor Statistics Quarterly Census of Employment and Wages data based on Maine technology clusters identified in Colgan and others, "Assessing Maine's Technology Clusters."
47. Maine Software and Information Technology Industry Association, "Maine Technology Cluster Overview" (Portland, 2005).
48. Maine Department of Labor, "Trends and Implications for the Maine Workforce."
49. Corporation for Enterprise Development, "Development Report Card of the States."
50. Maine Department of Labor, "Trends and Implications for the Maine Workforce."
51. Robert Atkinson, "The State New Economy Index" (Washington: Progressive Policy Institute, 2002). These data are compiled from Cognetics data published in 2000; Raymond J. Keating, "2004 Small Business Survival Index," (Washington: Small Business and Entrepreneurship Council 2005).
52. Laurie Lachance, "Just Imagine a State Where . . ." Presentation to the Maine Development Foundation's 27th Annual Meeting, September 27, 2005.
53. Metropolitan area rankings are based on the year-2000 populations of all county-based U.S. metropolitan areas, defined in 2003 by the Office of Management and Budget.
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55. Brookings analysis of public utility hook-up data developed by the Maine State Planning Office, Maine Office of Geographic Information Systems, Central Maine Power Company, and Bangor Hydro-Electric Company.
56. All data on recent development in this paragraph comes from a Brookings analysis of residential growth maps created by Robert Faunce and the Sheepscot Valley Conservation Association GIS Support Center.
57. Based on the May 6th, 2004 general zoning map for the Town of Woolwich, viewable online at: www.woolwichme.com/Woolwich%20maps/maps/General%20Zoning%20Maps.pdf.
58. Rural land loss numbers come from a Brookings analysis of GIS housing density data compiled by David Theobald of Colorado State University. Rural land encompasses all areas that contain less than one housing unit per 40 acres. Therefore, land that is stated as having been "converted" from rural to non-rural use by the year 2000 includes all land that was rural in 1980 or 1990 but that exceeded the rural housing density threshold in the year 2000. The rural threshold of one unit per 40 acres is a commonly used benchmark that represents the maximum housing density allowable for wildlife and rural economic functions.
59. According to the 2000 Census, the total area of Rhode Island is 1,545 square miles, though the total land area is only 1,045 square miles.
60. Only 2 percent of the land in the Maine's unorganized territory is deemed "developable."
61. Alan Crowell, "Growing Pains in Unorganized Territory." *Kennebec Journal*, July 9, 2006.
6. Maine Department of Labor, "Maine Job Vacancy Survey: An Assessment of Potential Training Needs" (Augusta, 2006).
7. Lachance, "Just Imagine a State Where . . ."
8. Planning Decisions, Inc. "An Economic Development Strategy for York County: What Are the Best Prospects for Future Growth?" (Springvale: Southern Maine Regional Planning Commission, 2006).
9. U.S. Census Bureau.
10. U.S. Census Bureau American Community Survey, 2005.
11. Maine Department of Labor, "Trends and Implications for the Maine Workforce."
12. Ibid.
13. Ibid.
14. Ibid.
15. Bureau of Economic Analysis.
16. Bureau of Labor Statistics.
17. Lisa Pohlmann and Christopher St. John, "Life After Lay-Off in Central Maine" (Augusta: Maine Center for Economic Policy, 1999); Maine Department of Labor, "Trends and Implications for the Maine Workforce."
18. Governor's Office of Redevelopment Reemployment and Business Support, "The North Star Alliance: A Partnership to Transform the Workforce and Economy of Coastal Maine" (Augusta, 2006).
19. Maine Department of Labor, "The Relationship Between Education and Unemployment and Earnings" (Augusta, 2004).
20. Brookings analysis of Bureau of Labor Statistics Quarterly Census of Employment and Wages data.
21. Ibid.
22. Ibid.
23. Ibid.
24. Ibid. Tourism numbers include only direct employment in the amusement, gambling, recreation, and accommodation industries.
25. Bureau of Labor Statistics.
26. See Colgan and others, "Assessing Maine's Technology Clusters."
27. National Science Foundation, "Science and Engineering Profile: Maine" (Washington, 2006).

III. EMERGING IMPLICATIONS OF MAINE'S TRENDS (Pages 50–67)

1. Maine Department of Labor, "Trends and Implications for the Maine Workforce."
2. U.S. Census Bureau American Community Survey, 2005. The margin of error reported by the Census for Maine's BA attainment rate was +/- 0.7, meaning the actual rate could be anywhere between 24.9 and 26.3 percent. In any case, this is a significant improvement over the 2000 figure of 22.9 percent.
3. Personal communication from Helen Pelletier, Maine Community College System, July 25, 2006.
4. David Silvernail and Brianne Woodard, "Maine's College Graduates: Where They Go and Why (Revisited)" (Portland: University of Southern Maine, 2006).
5. Towers Perrin, "The 2003 Towers Perrin Talent Report" (New York, 2003).

28. This passage draws on a review of the 1999 to 2006 editions of Corporation for Enterprise Development's "Development Report Card of the States."
29. Maine Department of Labor, "Trends and Implications for the Maine Workforce."
30. National Venture Capital Association, "National Venture Capital Association Yearbook" (Arlington, VA, 2004).
31. Ewing Marion Kauffman Foundation, "Promoting and Supporting an Entrepreneurship-Based Economy in Maine" (Kansas City, 2002).
32. Maine Software and Information Technology Institute, "IT Overview for the Maine Science and Technology Advisory Council" (Portland, 2006).
33. Calculations based on Maine Revenue service data for taxable retail sales by economic area. Dollars were adjusted to year-2005 values.
34. Maine State Planning Office, "The Cost of Sprawl" (Augusta, 1997).
35. In 1974, the Real Estate Research Corporation showed infrastructure and operating costs that were 54 to 89 percent higher in low-density communities than in more dense, planned communities. A meta-analysis performed in 1989 by James Frank documented an 80 percent difference in infrastructure costs between close-in development and development ten miles from central facilities. Another 1989 study by Duncan and others examined eight actual developments in Florida and found that capital costs (including roads, schools, utilities, etc.) were 53 percent higher under unplanned development (\$15,941 versus \$10,401). In 2000, Burchell and others calculated the savings that could be had by local governments across the country if more compact forms of development replaced the status quo. They found national savings from 2000 to 2025 of 11.8 percent for road building and 6.6 percent for water and sewer costs. As for annual service delivery and operations costs, the authors showed annual fiscal savings of 2.8 percent, or \$4 billion. In Maine, it was found that the state could realize annual service provision net savings of \$143 million by reigning in sprawl. Bollinger, Berger, and Thompson, in their 2001 study of counties in Kentucky, found that for each type of county—from those with large central cities to those that were mostly rural—the costs of new services per 1,000 new residents were considerably higher for those counties that had more dispersed development. And in 2002, Speir and Stevenson demonstrated higher costs of service provision for low-density, large-lot development as opposed to more dense, smaller-lot development.
36. These five rural districts were Maranacook CSD-Readfield, Monmouth, Palermo, Vassalboro, and Windsor.
37. New England Environmental Finance Center, "Analysis of Per Capita Expenditures of Suburbanizing Communities in Maine" (Portland, 2005). Quickly suburbanizing towns are characterized in the report as being towns that were located within 30-minutes driving distance to a service center or metropolitan area, had between 1,200 and 8,000 people, and had population growth of at least 70-percent from 1970 to 2000. A sample of 10 such towns were included in the study: Buxton, China, Durham, Gray, Hermon, New Gloucester, Raymond, Sidney, South Berwick, and Waterboro. Of the ten, seven towns have U-shaped or stepped cost curves with 2004 per-capita expenditures that exceed 1970 real per-capita expenditures.
38. According to federal standards, a cost burden is considered "unaffordable" if thirty percent of income or more is spent on housing. "Maine Rental Housing Facts" and "Maine Homeownership Facts," MSHA Communications and Planning Unit, 2004.
39. Maine Development Foundation, "Measures of Growth in Focus 2006: Performance Measures and Benchmarks to Achieve a Vibrant and Sustainable Economy for Maine" (Augusta: Maine Economic Growth Council, 2006). Available at mdf.org/megc/measures/megc2006.pdf
40. Maine State Housing Authority, "The State of Maine's Housing 2002."
41. U.S. Census Bureau.
42. Low-income families are defined as those households earning below 50 percent of area median income. See Maine Department of Economic and Community Development and Maine State Housing Authority, "Maine Consolidated Plan: Five Year Plan 2005-2009" (2004).
43. Brookings analysis using U.S. Census data on housing units classified as "for seasonal, recreational, or occasional use."
44. Based on data from the Survey of Consumer Finances and the National Realtors Association, Maine Revenue Services estimates that 30.7 percent of Maine second-home value is owned by Maine residents, meaning that non-residents own 69.3 percent of it. E-mail to author, March 3, 2006, from Michael J. Allen, Director of Econometric Research, Maine Revenue Services.
45. A housing price-to-household income ratio of 3.5 is used here as an upper-bound threshold of affordability. Some organizations, such as Fannie Mae, have used a price-to-income ratio of 2.5 while Goldman Sachs recently suggested 3.5 may be more appropriate due to lower interest rates. The use of 3.5 allows for a "best-case scenario" analysis of housing affordability for typical Maine households.
46. Data on vehicle miles traveled are from the Federal Highway Administration's annual highway statistics, available at www.fhwa.dot.gov/policy/ohim/hs04/index.htm for 2004 and www.fhwa.dot.gov/ohim/1996/index.html for 2006.
47. To calculate household costs, this analysis used the Census 2004 ACS estimate of Maine's average household size of 2.39, multiplied by the vehicle miles traveled per-capita for each year. The American Automobile Association used a rate of 15.1 cents per mile for total operating costs for the average automobile, including gas (9.5 cents per mile), maintenance (4.9 cents per mile), and tires (.7 cents per mile). Because the U.S. Department of Energy documented an average retail price per gallon of gas in 1996 in the New England region of \$1.52 in 2005 dollars, the per-mile cost of gas in the AAA formula was adjusted to 6 cents for the 1996 calculation.
48. Simon Anholt, "Branding Places and Nations." In Rita Clifton and John Simmons, eds., *Brands and Branding* (New York: Bloomberg Press, 2003).
49. Longwoods International, "Focus on Tourism Fall 2004 Newsletter" (2004).
50. David A. McGranahan, "Natural Amenities Drive Rural Population Change" (United States Department of Agriculture, 1999).
51. Richard Florida, *The Rise of the Creative Class* (New York: Basic Books, 2002); Terry Nichols Clark and others, "Amenities Drive Urban Growth," *Journal of Urban Affairs* 24:5.
52. Maine Forest Service, "The 2005 Biennial Report on the State of the Forest and Progress Report on Forest Sustainability Standards" (Maine Department of Conservation, 2005).
53. Susan M. Stein and others, "Forests on the Edge: Housing Development on America's Private Forests" (USDA Forest Service, 2005).
54. John M. Hagan, Lloyd C. Irland, and Andrew A. Whitman, "Changing Timberland Ownership in the Northern Forest and Implications for Biodiversity" (Manomet, MA: Manomet Center for Conservation Sciences, 2005).
55. Maine Development Foundation, "Maine's Natural Resource-based Industries: Indicators of Health" (Augusta, 2004).
56. American Farmland Trust, "Farming on the Edge" (Washington, 2003).
57. Ibid.
58. Brookings analysis of USDA Economic Research Service data. Values shown are in 2004 dollars.
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60. Ibid.
 61. Hugh Coxe, Theresa Oleksiw, and Judy Colby-George, "Cundy's Harbor Working Waterfront Study: Village Profile and Policy Options" (2004).
 62. Ibid.
 63. Coastal Enterprises, Inc., "Tracking Commercial Fishing Access: A Survey of Harbormasters in 25 Maine Coastal Communities" (Wiscasset, 2004).
 64. David Vail and others, "Tourism and Maine's Future: Toward Environmental, Economic, and Community Sustainability" (Augusta: Maine Center for Economic Policy, 1998).
 65. Longwoods International, "Travel and Tourism in Maine: The 2004 Visitor Study Management Report" (Maine Office of Tourism, 2005).
 66. David Vail, "Sustaining Nature-Based Tourism in 'Vacationland'" (Brunswick: Bowdoin College, 2003). It should be noted that the yearly revenue number for tourism does not subtract government expenditures on things like roads, parking, water supply, and other expenses that derive in part from tourism.
 67. Longwoods International, "Travel and Tourism in Maine."
- IV. WORKING TOWARD CHANGE (Pages 68–95)**
1. The years of Gov. Ken Curtis' administration between 1967 and 1974 saw the consolidation and modernization of state government and the creation of the university system, for example. Gov. James Longley's succeeding tenure brought the implementation of important government cost efficiencies, while Gov. Joe Brennan's years (1979–1986) achieved breakthroughs in using government's bonding authority to achieve development goals, and Gov. John McKernan's administration (1987–1994) brought the elevation of economic development efforts to a new prominence, with the creation of a cabinet-level agency, the Department of Economic and Community Development (DECD). For its part, Gov. Angus King's governorship (1995–2002) saw the infusion of technology into education; the creation of the Maine Technology Institute and the Maine Downtown Center to, respectively, invest early-stage "patient" capital in the commercialization of Maine technology ideas and the revitalization of Maine's historic downtowns; and a new concern about the costs of suburban sprawl and the need for "smart growth." Most recently, the current administration of Gov. John Baldacci has stayed the course on King's focus on technology, research and development, and smart growth while developing the community college system and focusing economic development activities on a clear, "cluster"-based understanding of the economy.
 2. See, for example, Maine Department of Economic and Community Development, "Governor Baldacci Announces an Economic Development Strategy for Maine" (Augusta, 2004). Available at www.econdevmaine.com/announcements/details.asp?PressID=4
 3. Laurie Lachance, "Thirty Years of Economic Development in Maine: The Good, the Bad, and the Ugly" (Washington: Brookings Institution, 2006).
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 5. Richard Barringer and others, "Land for Maine's Future: Increasing the Return on a Sound Public Investment" (Augusta: New England Environmental Finance Center and Margaret Chase Smith Center for Public Policy, 2004).
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 7. G. Michael Alder and others, "Observations and Recommendations of the AAAS Review Panel on a Proposal to Create a Maine Technology Institute." Unpublished manuscript. March 23, 1999.
 8. Typical of recent ratings of the state's tax burden was the Tax Foundation's 2006 analysis of total state-local burden, which ranked the state first among the states for its state-local tax load as a percentage of per capita income. See www.taxfoundation.org/taxdata/show/336.htm I note that the methodologies of this rating have been widely criticized. In other ratings, Maine ranked fourth (behind the District of Columbia, New York, and Wyoming) in terms of state and local tax collections as a percentage of personal income (13.4 percent) in the 2005 listing of the Federation of Tax Administrators; and fourth also in a recent memo from the Federal Reserve Bank of Boston. It should be noted, of course, that estimates of tax burden vary by methodology and source. For example, data from Maine's Office of Fiscal and Program Review frequently show that Census estimates of total state and local property tax collections run somewhat higher than actual collections, although the variation is not huge. Another factor to bear in mind is that significant portions of Maine's tax load are actually paid by out-of-state property owners, consumers, and business owners. Finally, while Maine ranks high on measures of taxation, it ranks somewhat lower on measures of total "own source revenue," which reflects its very low imposition of various fees and charges. For a good discussion of all of this issues, see Christopher St. John, "Making Sense of Maine's Tax Burdens" (Augusta: Maine Center for Economic Policy, 2004).
 9. The rural comparison states, selected by their low U.S. Census-defined "urban areas," encompass the nine most rural U.S. states (not including Maine) and were adopted to provide a set of geographically similar comparison states, since urbanization can have large impacts on the cost and efficiency of service provision. The nine comparison states are: Vermont, Mississippi, Wyoming, South Dakota, Montana, West Virginia, Arkansas, North Dakota, and Iowa.
 10. Full-time equivalent government employment per capita was slightly higher than the national average, and ranked ninth, though payroll relative to income ranked a middle-of-the-pack 26th.
 11. See Robert Tannenwald and Nicholas Turner, "Interstate Fiscal Disparity in State Fiscal Year 1999" (Boston: Federal Reserve Bank of Boston, 2006). Available at www.bos.frb.org/economic/ppdp/index.htm In this assessment Maine ranked 48th in 1999 for its low fiscal "need."
 12. National Center for Education Statistics, Common Core of Data, 2003–2004.
 13. Select Panel on Revisioning Education in Maine, "The Learning State: Maine Schooling in the 21st Century." Draft report. (Augusta: Maine Board of Education, 2005).
 14. National Center for Education Statistics, Common Core of Data, 2003–2004.
 15. Moore's analyses, prepared for this report, conclude that by seeking economies of scale in K-12 school system administration Maine could save:
 - \$10 million by reducing Maine's per pupil "general administration" cost of \$213, as defined by the NCES, to the national average of \$163. NCES defined "general administration" as district administration, not including special education and transportation
 - \$22 million by reducing Maine's "system administration" line by a comparable percentage (31 percent)
 - \$25 million by reducing "system administration" to the \$195 per pupil cost of the Scarborough School Department, which is nearly identical in size to the average district nationally
 - \$36 million by moving school unions and municipal units toward the per pupil administrative costs of consolidated districts in the state.

16. Information in this sidebar comes from Cumberland County Strategic Planning Process Education Sub-committee, "SWOT Analysis" (2006).
17. Budget data here and in the next paragraph come from the Maine Bureau of the Budget.
18. See, for example, the Institute for a Strong Maine Economy, "No Place Left to Hide: Confronting Maine's Economic Future" (Portland, 2002).
19. See, for example, Christopher St. John, "Making Sense of Maine's Tax Burdens" and Robert Tannenwald, "Research Counters Claims that Taxes Drive Business Location" (Augusta: Maine Center for Economic Policy, 2006).
20. State-local government finance data come from the U.S. Census Bureau. For 2002 data see Table 6 in Philip Trostel, "Maine's State and Local Government Payroll and Expenditures" (Washington: Brookings Institution, 2006).
21. Again, estimates of tax burden vary by methodology and source. See St. John, "Making Sense of Maine's Tax Burdens." Nevertheless, in the final analysis, Maine's local tax system is highly unbalanced and state and local taxes in Maine are high by any standard.
22. See Timothy Bartik, "Can State and Local Policies Affect Economic Development?" (Kalamazoo: W.E. Upjohn Institute, 1991); Michael Wasylenko, "Taxation and Economic Development: The State of the Economic Literature," delivered at "The Effect of State and Local Public Policies on Economic Development," conference held at the Federal Reserve Bank of Boston, November 1996, cited in Robert Tannenwald, "What Matters to Business: From Someone Who's Never Met a Payroll." PowerPoint presentation delivered at the Maine Center for Economic Policy annual meeting, January 13, 2006; and Robert Tannenwald, "Research Counters Claims that Taxes Drive Business Location."
23. On this point, the academic empirical evidence is mixed, but suggestive. Bakija and Slemrod (2004) examine federal tax filing propensities at the state level and find that taxes affect reporting decisions. They attribute this to either tax planning or migration, or both. For their part, Saltz (1998), Cebula, Toma, and Saadamand (2002), and Feldstein and Vrobel (1998) find that state taxes do affect migration. Conway and Houtenville (2004), however, find only weak evidence of tax-induced migration among the elderly motivated by differing estate tax rules.
24. These data reflect Brookings' analysis of Maine Revenue Service's 2004 Municipal Valuation Return Statistical Summary, provided by the Maine Municipal Association.
25. See Bartik, "Can State and Local Policies Affect Economic Development?" and Wasylenko, "Taxation and Economic Development."
26. See Matthew N. Murray, "A Brief Commentary on the Property Tax in Maine" (Washington: Brookings Institution, 2006). Murray's report—which contains municipality- and region-specific tax-rate tables—describes Maine property tax rate differentials in detail and assesses their probable contribution to suburban sprawl.
27. See Matthew N. Murray, "Tax Policy and Economic Development in Maine: A Survey of the Issues" (Augusta: Margaret Chase Smith Center for Public Policy, 2002).
28. See Donald Bruce, William Fox, and M.H. Tuttle, "Tax Base Elasticities: A Multi-State Analysis of Long-Run and Short-Run Dynamics," *Southern Economic Review* (forthcoming).
29. See Murray, "A Profile of the Maine State and Local Tax System."
30. See Matthew N. Murray, "Exporting State and Local Taxes: An Application to the State of Maine" (Washington: Brookings Institution, 2006).
31. Personal communication with Michael Allen, Maine Revenue Services, March 3, 2006.
32. Maine State Planning Office, "Report on the Development of a Maine Building Rehabilitation Code" (Augusta, 2002).
33. Ibid.
34. Pre-existing structures are exempt from the IBC and IRC, unless the building is sold or extensively renovated. That means that old buildings then have to comply with the IBC and IRC, which can be quite costly.
35. Chris Leinberger, "Turning Around Downtown: Twelve Steps to Revitalization" (Washington: Brookings Institution, 2005).
36. Lori Allen, "Barriers to Service Center Redevelopment in Maine." Unpublished working paper. (Washington: Brookings Institution, 2006).
37. Leinberger, "Turning Around Downtown."
38. Donald C. Shoup, *The High Cost of Free Parking* (Washington: American Planning Association, 2005).
39. Ibid, p. 154.
40. Grow Smart Rhode Island, "Rhode Island Historic Preservation Investment Tax Credit." (Providence, 2005).
41. For general discussion as well as empirical assessment of the association of political fragmentation with sprawl see John I. Carruthers, "Growth at the Fringe: The Influence of Political fragmentation in United States Metropolitan Areas." *Papers in Regional Science* 82: 475–499, and John I. Carruthers and Gudmunder Ulfarson, "Fragmentation and Sprawl: Evidence from Interregional Analysis." *Growth and Change* 33: 312–340.
42. Advisory Commission on Intergovernmental Relations, "Measuring Local Discretionary Authority" (Washington, 1981).
43. See Evan Richert, "Regionalism, New England Style," *Choices* 9 (4) (Maine Center for Economic Policy) and Frank O'Hara, "County Reform is the Best Regionalism Strategy," *Choices* 10 (5) (Maine Center for Economic Policy).
44. Maine State Planning Office, "An Evaluation of the Growth Management Act and Its Implementation." (Augusta, 2006).
45. Ibid.
46. Ibid.
47. O'Hara, "County Reform is the Best Regionalism Strategy."

V. AN ACTION PLAN FOR SUSTAINABLE PROSPERITY (Pages 96–127)

1. This figure excludes Grant Anticipation Revenue Vehicle (GARVEE) debt.
2. These figures exclude Grant Anticipation Revenue Vehicle (GARVEE) debt.
3. Portland Press Herald, "Amid Competing Needs, Green Infrastructure Sags." June 24, 2006.
4. Maine State Planning Office, "Sustaining Maine's Green Infrastructure."
5. David Vail, "Maine's Rim Counties Could Lure Many More Visitors, Especially 'Experiential Tourists.'" Brunswick Times-Record, August 25, 2006.
6. See Murray, "Exporting State and Local Taxes" for a discussion of rationales for "exporting" tax burden onto non-residents. Maine's lodging tax of 7 percent falls slightly below the regional average of 8.12 percent.
7. Maine Office of Innovation, "A Science and Technology Action Plan for Maine" (Augusta: Maine Department of Economic and Community Development, 2005).
8. Maine Development Foundation, "Measures of Growth in Focus 2006."
9. Charles Colgan and Bruce Andrews, "Evaluation of Maine Technology Institute Programs (For Awards Ending June 30, 2002–June 30, 2004)" (Augusta: Maine Technology Institute, 2004).

10. Maine State Planning Office, "30 and 1000: How to Build a Knowledge-Based Economy in Maine and Raise Incomes to the National Average by 2010" (Augusta, 2001). This report challenged the state to ensure that it spends \$1,000 per worker on R&D by 2010.
11. For discussions of the role of networks, coalitions of firms, and multi-party problem-solving in cluster success see Cortright, "Making Sense of Clusters" and National Governor's Association, "A Governor's Guide to Cluster-Based Economic Development" (Washington, 2002).
12. Select Panel on Revisioning Education in Maine, "The Learning State."
13. Ibid., and National Center for Education Statistics (NCES), "State Profiles of Public Elementary and Secondary Education, 1996–1997" (Washington, 2000).
14. For a good look at the spread of voluntary collaboration, service cooperation, and even district consolidation see Douglas Rooks, "A Case for Cooperation: Making Connections to Improve Education for All Maine Students" (Augusta: Maine Children's Alliance, 2006).
15. See, for example, Philip Trostel and Catherine Reilly, "Improving Educational Resource Allocation in Maine" (Orono: Margaret Chase Smith Policy Center, University of Maine, 2005).
16. Select Panel on Revisioning Education in Maine, "The Learning State."
17. David Silvernail and Ida Batista, "Fiscal Analysis of the Report of the Select Panel on Revisioning Education in Maine" Author's draft. (2006).
18. Maine Department of Administrative and Financial Services, "Fund for the Efficient Delivery of Local and Regional Services: 2005 Annual Report" (Augusta, 2005).
19. Kirsten Hebert, "Efficiencies in Municipal Government" (Augusta: Maine Municipal Association, 2002).
20. For a good discussion of the generally accepted requirements of a good tax system see Murray, "Tax Policy and Economic Development in Maine."
21. The need to adjust the taxable base of the state's sale tax has been a staple of at least nine major academic and legislative analyses of the Maine tax code dating back to 1980. See Murray, *op. cit.*, and Maine Municipal Association, "Implementing the School Finance and Tax Reform Act of 2003" (Augusta, 2003).
22. See Todd Gabe, "State and Local Government Finances in Maine: Early Impacts of LD1" (Augusta: Margaret Chase Smith Policy Center, 2006) and Maine Revenue Services, "LD1: First-Year Impact on Tax Burden" (Augusta, 2006) for analyses of the first-year impacts of LD1.
23. Analysis conducted for Brookings by Matthew N. Murray using U.S. Census Bureau 2004 State Tax Collections data and Bureau of Economic Analysis personal income data.
24. Robert Cline, Tom Neubig, and Andrew Philipps, "Total State and Local Business Taxes: Nationally 1980–2005, by State 2002–2005, and by Industry 2005" (Ernst & Young, 2006).
25. The cost estimate comes from an e-mail from Michael Allen, Maine Revenue Services, July 25, 2006.
26. See Murray, "Exporting State and Local Taxes."
27. See Vail and others, "Tourism and Maine's Future" and Maine State Planning Office, "Sustaining Maine's Green Infrastructure."
28. See Murray, "Exporting State and Local Taxes."
29. For a review of multiple strategies for exporting property tax burden to non-residents see Murray, "Exporting State and Local Taxes."
30. Personal communication with Michael Allen, Maine Revenue Services, March 3, 2006.
31. The study, available at www.brookings.edu/metro/maine, was led by the Androscoggin Valley Council of Governments and incorporated research by the Southern Maine Regional Planning Commission, the Greater Portland Council of Governments, the Kennebec Valley Council of Governments, and the Northern Maine Development Commission. The service centers analyzed in the study include: Portland, South Portland, Westbrook, Lewiston, Auburn, Augusta, Waterville, Presque Isle, Biddeford, Saco, and Sanford.
32. Sara C. Galvan, "Rehabilitating Rehab through State Building Codes," *Yale Law Journal* 115 (7)(2006).
33. Raymond J. Burby, David Salvesen, and Michael Creed, "Encouraging Residential Rehabilitation with Building Codes: New Jersey's Experience," *Journal of the American Planning Association* 72 (2) (2006).
34. Leinberger, "Turning Around Downtown."
35. Ibid.
36. Ibid.
37. National Park Service, "Federal Tax Incentives for Rehabilitating Historic Buildings: Annual Report for Fiscal Year 2004" (Washington, 2005).
38. Harry K. Schwartz, "State Tax Credits for Historic Preservation." (Washington: National Trust for Historic Preservation, 2006).
39. Missouri Department of Natural Resources, "Economic Impacts of Historic Preservation in Missouri" (Jefferson City, MO, 2002).
40. Maine State Planning Office, "An Evaluation of the Growth Management Act and its Implementation."
41. Ibid.
42. To read the Gateway 1 memorandum of understanding, see www.gateway1.org/background/memorandum.pdf.
43. Candace H. Stowell and Mark Shelburne, "Responding to HUD's Affordable Communities Initiative: Will It Make a Difference?" *Practicing Planner* Winter 2004. Available at www.planning.org/affordablereader/pracplaner/hudvol2no4.htm.
44. Maine Community Preservation Advisory Committee, "Affordable Housing: Barriers and Solutions for Maine" (Augusta, 2003).
45. Inclusionary zoning ordinances require all new housing developments with a certain number of units to set aside at least 10-30 percent of those units for people with low-to-moderate incomes, with affordability restrictions placed in the deed to the property. According to David Rusk, more than 130 localities nationwide currently have such provisions.

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