Expanded Policy

SMART GROWTH POLICY PACKAGE

Policy summary: Development patterns significantly influence vehicle miles traveled (VMT), which could be substantially reduced by additional "smart growth" that makes it easier for households and businesses to decrease the number and distance of vehicle trips. Diffuse single use development accessed by car results in 30 percent[55] more VMT than compact mixed-use growth. Massachusetts already has several policies promoting smart growth, but new, complementary policies are necessary to achieve our smart growth targets. Such policies would focus on influencing infrastructure investments by state agencies and planning decisions made by local governments.

Economy-wide GHG emissions reduced in 2020	0.4 million metric tons; 0.4%
Motor fuel cost savings in 2020	$190 million
Jobs gained in 2020 (direct and indirect)	1,100 jobs

Clean energy economy impacts: Large transportation cost reductions can be expected for residents and business due to reduced vehicle ownership and fuel consumption. High density mixed-used development will increase building efficiency and make district energy and combined heat and power more feasible.

Rationale: Development of forests and open spaces increases GHG emissions in two ways: lost sequestration capacity and released carbon that had been stored in standing trees, and increased VMT due to sprawl. The Patrick-Murray Administration's historic commitment to land conservation has permanently protected over 72,000 acres from development, preserving one of our most valuable carbon sinks, and this initiative will continue into the future. Meanwhile, better land use patterns will be important for reducing or eliminating projected VMT increases and realizing GHG reductions from the transportation sector, which is expected to account for close to 40 percent of total GHG emissions in Massachusetts in 2020, with light vehicles (cars, SUVs, minivans, pickups) accounting for about 28 percent of the total. The Plan assumes that aggressive implementation of current land use policies can result in a 0.4 million metric tons of GHG reduction in 2020, based on getting 80 percent of new residential development to occur in mixed-use areas that are bike and pedestrian friendly and higher than typical density. Strict adherence to and continued enhancement of current policies, along with the implementation of new policies and programs will be necessary to realize the 2020 and 2050 GHG targets.

Design issues: Existing state policies include (a) GreenDOT — which prioritizes transportation projects that preserve the existing system, support denser "smart growth" development, and promote increased ridership, walking, and biking; (b) the MassWorks Infrastructure Program, that provides a one-stop shop for infrastructure funds via six separate programs, and promotes consistency with other state initiatives such as smart growth, Chapter 40R, and the 43D Expedited Permitting Program; and (c) the South Coast Rail Executive Order, which supports the South Coast Rail Economic Development and Land Use Plan by ensuring that agencies review

[55] See: Growing Cooler: The Evidence on Urban Development and Climate Change.

their policies, actions and investments to support and implement plan recommendations including priority development and preservation areas. Complementary policies are needed in order to achieve the 80 percent smart growth target. These are:

1. Reform state planning, subdivision, and zoning statutes — Pass the Land Use Partnership Act or similar legislation that provides municipalities a better framework for planning and zoning, enhanced tools to plan for and manage growth, and incentive to reduce VMT and GHG emissions through better development.
2. Provide technical assistance and undertake a smart growth promotional campaign — Expand efforts to help establish zoning and other land use regulations that reduce VMT. Provide direct technical assistance by state employees, tools such as model zoning, and grants to hire professional assistance. Also, use public appearances, the media, etc., to promote smart growth by pointing out its many benefits.
3. Require state infrastructure spending to include smart growth development in the criteria for funding decisions — State investments, particularly those in infrastructure and buildings, influence where and how growth occurs. Enhanced use of these investments to promote mixed-use, high-density development is critical to attainment of targeted VMT reductions resulting from better land use. This could be accomplished either via Executive Order or through legislation that codifies the *Sustainable Development Principles* and requires all agencies permitting, building, or funding infrastructure projects to take into account a set of smart growth criteria.
4. Significantly increase incentives to municipalities to plan and zone for development that reduces VMT — Much as the Green Communities Program has succeeded in persuading many communities to adopt desired practices - including the Stretch Code - strengthening existing incentives and offering new ones can persuade communities to use their regulatory authority in ways that reduce VMT. Enhance existing incentives such as Chapter 40R, Commonwealth Capital, and the Growth District Initiative, and implement new ones such as "Municipal Challenge Grants" that recognize the GHG benefits of development practices that preserve forest cover. Grants could be awarded to communities that institute an open space zoning bylaw that protects 50 percent of a parcel as forest, limits lot clearance to one-third acre per house, and requires best management practices for lot layout and tree preservation.

GHG impact: Existing policies will reduce GHG emissions by 0.23 percent in 2020[56] and recommended enhancements will realize additional reductions. Recent studies[57] have shown integrated land use strategies can produce GHG reductions of between 2.7 percent and 4.4 percent from the baseline by 2050, depending on how aggressively the Commonwealth implements smart growth policies and practices.

Equity issues: Smart growth increases affordability by reducing the amount households spend on both housing and transportation. It further reduces housing costs by increasing the variety of housing types available and decreasing the amount of land and infrastructure needed per housing unit, and enhances access to jobs and services for the young and infirmed, as well as those without a car. Finally, smart growth provides a higher percentage of new jobs in urban areas where unemployment tends to be highest.

[56] See: Eastern Research Group: Final Report to the Climate Protection and Green Economy Advisory Committee.

[57] See: Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions

Other benefits: Smart growth is as much as 70 percent cheaper for governments than the same amount of sprawl. It simply costs less to provide infrastructure (streets, schools, sewers, etc.) and services (like police and fire protection) to denser, more contiguous households than to far-flung, low-density communities.[58] Studies found that New Jersey and Rhode Island would save $1.3 and $1.5 billion, respectively, over 20 years.[59] It enhances public health by reducing air pollution and increasing physical activity, and enhances quality of life by improving neighborhoods, reducing travels times, and lowering costs. This, in turn, enhances economic competitiveness by appealing to prospective employees. Finally, it reduces development of open space, including forested land that sequesters carbon.

Costs: Existing and proposed smart growth policies have little cost as they rely almost entirely on enhanced use of existing funding. For example, state transportation funds should be shifted toward investments in support of desired development, without increasing the amount expended. Similarly, the financial incentives anticipate the use of existing state funding sources rather than creation of new ones. Modest additional funds are needed for technical assistance to municipalities and other entities to implement better zoning and other land use practices.

Experience in other states: Delaware, Maryland, New Jersey, New York, Rhode Island, and others have implemented smart growth programs that have improved growth patterns and thereby reduced VMT.

Legal authority: Legislation is needed to reform state planning, zoning and subdivision statutes and to codify and require agencies to implement the *Sustainable Development Principles*. The Commonwealth may also need to permit certain funding programs to implement municipal incentives and to authorize additional funding for incentives and technical assistance.

Implementation issues: It will be important achieve high levels of cooperation from all stakeholders, including development interests and local communities.

Uncertainty: Projected VMT and GHG reductions are taken from national level analyses and are not Massachusetts-specific. While state investments in infrastructure and buildings will help to steer growth to desirable locations and forms, developers can still finance their own projects and build in ways that result in excessive VMT. In addition, it is hard to project how many communities will take advantage of state incentives and whether growth will occur in these communities rather than others zoned for sprawl.

[58] http://www.brookings.edu/opinions/2003/0413metropolitanpolicy_katz.aspx?p=1

[59] See: Impact Assessment of the New Jersey State Development and Redevelopment Plan.

Existing Policy

Sustainable Development Principles

Policy summary: In 2007, the Patrick-Murray Administration updated the Massachusetts *Sustainable Development Principles* to guide creation and implementation of state agency policies and programs, as well as investments in land and infrastructure. Municipalities, through policies like Commonwealth Capital, are also encouraged to modify their planning, regulatory, and funding actions to achieve consistency with the principles. The principles include promoting clean energy, in the form of energy efficiency and renewable power generation, in order to reduce GHG emissions and consumption of fossil fuels. They also encourage reductions in vehicle miles traveled (VMT) through actions such as the creation of "pedestrian-friendly" districts and neighborhoods that mix commercial, civic, cultural, educational, and recreational activities with parks and homes. In regard to housing, the principles call for building homes "near jobs, transit, and available services."

State investments, particularly those in infrastructure, have an important influence on where and how growth occurs. The principles are intended to guide policies, programs, and expenditures, particularly those that affect where and how development occurs. Making state investments consistent with the principles increases the amount of growth that takes place in locations and densities that reduce VMT and GHG emissions and have other clean energy benefits.

Economy-wide GHG emissions reduced in 2020 (in conjunction with Commonwealth Capital and MEPA)	0.1 million metric tons; 0.1%

Clean energy economy impacts: *Sustainable Development Principle* #9 — Promote Clean Energy — explicitly encourages clean energy practices, aiding development of clean energy jobs and reduced energy costs. Also, *Sustainable Development Principle* #1 — Concentrate Development and Mix Use, along with *Sustainable Development Principle* #7 — Provide Transportation Choice, can enable significant transportation cost reductions for residents and business due to reduced vehicle ownership and fuel consumption. Finally, Principle #1 will help to increase building efficiency and make district energy and combined heat and power more feasible.

Rationale: The principles provide a value statement and basic guide that state and municipal employees, business interests, land owners, developers, conservation groups, and others can turn to when making choices about their actions and investments. State policies, such as Commonwealth Capital, have the principles as their foundation. These policies expand upon the principles and provide an incentive to implement them.

Policy design: Readily implemented, since legislation is not required and regulatory changes would be minimal. However, improving the consistency of a large number of programs with the principles will require Executive leadership, perseverance, and a willingness to overcome obstacles.

One example of a state program that has utilized the *Sustainable Development Principles* is the Commonwealth Capital Program. More than $600 million in grants and low interest loans are awarded annually based in part on Commonwealth Capital scoring. Municipal smart growth/smart energy consistency is assessed through a Commonwealth Capital application. Resulting scores are

part of the proposal evaluation process for each grant or loan program. The more smart growth/smart energy oriented a community is, the more likely it is to receive funding. Since 2005, 315 out of 351 of the Commonwealth's communities have applied at least once and hundreds of new plans and regulations have improved municipal consistency with the *Sustainable Development Principles* by 10 percent (the median score has risen from 63 to 76 out of a possible 140).[54]

GHG impact: Existing smart growth policies, including the *Sustainable Development Principles*, are estimated to reduce GHG emissions by 0.1 percent in 2020. Recent studies[3] have shown integrated land use strategies can produce GHG reductions of between 2.7 percent and 4.4 percent from the baseline by 2050 depending on how aggressively the Commonwealth implements smart growth policies and practices.

Other benefits: Development consistent with the principles would lower operational and capital costs to government and society, improve energy conservation, better protect natural resources, increase housing and transportation choice, lower housing and transportation costs, improve public health, and enhance social and environmental justice.

Costs: There are predicted to be no incremental costs, as this policy simply requires more consistent decision making, particularly regarding the investment of current state resources in growth inducing infrastructure.

Equity issues: Smart growth increases affordability by reducing housing and transportation costs. It enhances access to jobs and services for those who can't/don't drive and provides a higher percentage of new jobs in urban areas where unemployment tends to be highest. Those who want to build commercial/industrial projects or live in homes in places and patterns that are inconsistent with the principles may pay more as these projects will no longer receive a state subsidy.

Experience in other states: Many states have successfully used sustainable development or smart growth principles to guide policies, programs, and investments.

Legal authority: The principles are presently implemented through an Executive Order. See Smart Growth Package for possible expanded scope of funding subject to principles and codification in legislation.

Implementation issues: Consistency of state policies, programs, and expenditures with the principles is not universal, and consistency is not always a prominent consideration in the decision making process.

Uncertainty: Calculating VMT and GHG benefits requires assumptions about how state policies, programs, and particularly spending will change to conform to the principles, as well as how dependent upon, or influenced by, state investments development is. Also, it is hard to predict how communities and developers will respond to incentives and other policies that encourage them to embrace the *Sustainable Development Principles*.

[54] See www.mass.gov/commcap for more information, including detailed analyses of past results and the 2011 application.