FROM SMART GROWTH TO SUSTAINABLE CITIES

Planning for Change: Planning in Times of Change
Derry/Londonderry, Northern Ireland
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OVERVIEW

• What is Smart Growth
• What have we learned?
• Sustainable Cities
• Scenario analysis
"Smart growth" covers a range of development and conservation strategies that help protect our health and natural environment and make our communities more attractive, economically stronger, and more socially diverse.

US EPA

TEN PRINCIPLES OF SMART GROWTH

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<th>Mix land uses</th>
<th>Preserve open space, farmland, natural beauty, and critical environmental areas</th>
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<td>Promote compact building design</td>
<td>Strengthen and direct development toward existing communities</td>
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<td>Create a range of housing choices and opportunities</td>
<td>Provide a variety of transportation choices</td>
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<td>Build walkable neighborhoods</td>
<td>Make development decisions predictable, fair, and cost effective</td>
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<td>Create distinctive, attractive communities with a strong sense of place</td>
<td>Encourage community and stakeholder collaboration in development decisions</td>
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Smart Growth at the Regional Scale

PORTLAND’S 2040 CONCEPT PLAN

Smart Growth at the Neighborhood Scale

SMART GROWTH vs. SPRAWL

Smart Growth

Sprawl
Smart Growth at the Block Scale

SMART GROWTH vs. SPRAWL

20 YEARS OF SMART GROWTH
WHAT HAVE WE LEARNED?

SMART GROWTH @ 2.0
What Have We Learned?

**URBAN FORM**

- Walkable, mixed use buildings and neighborhoods can be designed in ways that create vibrancy and economic success.
- Residents of mixed use neighborhoods tend to drive less, walk more, and have more social interaction.
- There remains substantial demand for low-density, suburban and exurban communities, especially for families with children and pets.

What Have We Learned?

**HOUSING AND URBAN DEVELOPMENT**

- Urban containment and urban revitalization has been difficult to achieve even in progressive cities and states.
- Development controls are major impediments that limit housing supply and affordability especially in high opportunity areas.
- Infill and redevelopment is generally more costly for both the public and private sectors.
TRANSPORTATION AND LAND USE

- Transportation and land use are inexorably interrelated and must be planned and managed together;
- Land use policy can be used to reduce VMT and increase transit ridership, but elasticities are low and barriers are high and costly to overcome;
- Prices matter: transit fares, fuel taxes, and tolls can have large effects on travel behavior.

What Have We Learned?

POLICY IMPLEMENTATION

- The “Quiet Revolution” is over; the revolutionaries have lost;
- The performance of incentive programs has been disappointing;
- Advancements in planning technology have improved local planning; but the focus of local planning remains politically determined.
- Help from the federal government is not likely any time soon.
Environmental sustainability: the ability to maintain rates of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely.

Sustainable development: development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The Three E’s: Environment, Economy and Equity.
While the principles of smart growth remain valid, the pursuit of sustainable cities will require address of new challenges:

- Climate and Energy
- Transportation Technology
- Workforce and Public Health, and
- Smart cities
The adoption of connected, autonomous, electric, and shared vehicles will challenge our knowledge of the transportation-land use connection.

Decisions about how and where we accommodate these new transportation technologies are critically important.

A growing body of research demonstrates the importance of place as a determinant of social mobility.

The use of opportunity maps and equity atlases has grown rapidly.

While the importance of neighborhood effects are widely acknowledged, their pathways remain poorly understood.
The promise of smart cities is real; but for most cities, the likely path forward is incremental with fits and starts.
THE PROMISE OF SCENARIO ANALYSIS

PRESTO
PROSPECTS FOR REGIONAL SUSTAINABILITY TOMORROW

THE PROMISE OF SCENARIO ANALYSIS

THE PRESTO MODELING REGION

Study Area

- Region Boundary
- Subregion: Core
- Subregion: Inner
- Subregion: Outer

[Map showing regions: Pennsylvania, Western, Baltimore, Washington, Delmarva, Lower Potomac]
Changes in transportation technologies, land use policies, and energy prices, could have profound impacts on future travel behavior development patterns, and environmental quality.

The future is not given or chosen but the outcome of exogenous forces and policy decisions!

Some policy decisions are robust, some are contingent.
• The rapid adoption of AVs has the potential to increase driving, foster a more dispersed development pattern, and cause more air and water pollution.

• Land development regulations have a strong effect on development patterns and tend to deflect growth from the inner suburbs.

• The rapid adoption of electric vehicles is key to achieving green house gas targets.

• Future transit ridership is highly uncertain.

• Not all preservation is alike.

• Growth containment at the local scale looks like NIMBYism at the regional scale.

• Trade offs are inevitable.
The principles of smart growth remain as valid today as 20 years ago.

Our track record in implementation leaves much to be desired.

Changes in climate, transportation, equity, public health, technology, and politics present new challenges and opportunities.

We need to step up to the challenge.

SINCERE THANKS!

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