Is it Playing in Pomfret?

*The State of Low Impact Development in Connecticut*

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Center for Land Use Education & Research
University of Connecticut
Center for Land Use Education and Research (CLEAR)

- Water
- Land use & climate adaptation
- Geospatial (mapping) technology

http://clear.uconn.edu
• The Project: What, Why, & How
• Results
• StoryMap Tour
• The Project: What, Why, & How
• Results
• StoryMap Tour
State of LID in CT Research Project

Research Brief

Synopsis

The State of Low Impact Development in Connecticut

About this Study

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Proposed Revised Stormwater Rule (MS-4 Program) in Connecticut

- More towns covered
- State and federal institutions covered
- Same 6 “minimum management measures” but:
  - Impervious cover mapping requirements
  - Stronger maintenance requirements
  - Emphasis on green infrastructure
  - Require LID in land use regs
  - Require IC reduction
Schlepping to town hall since 1991
How do you spell success?

The impacts in this report are divided into six categories to represent the various stages of local land use planning.

Changes to Land Use Plans ........................................ page 8

Plans constitute the backbone of local land use decision-making by setting out long term goals and a vision for how a community will grow.

Changes to Land Use Regulations ............................... page 12

Regulations and ordinances give “teeth” to plans and dictate the specifics of how, where and when development may occur. Changes here provide direct protection for priority community resources.

On the Ground Changes ........................................... page 16

Where and how development occurs. From “low impact” subdivisions to permanently protected open space, changes to the actual landscape are an ultimate indicator of impact.

Changes to the Decision Making Process...................... page 20

The players and specific steps involved in local land use decision-making can make a huge difference. These changes create a decision making structure that is more conducive to proactive planning.

Changes to Research & Information Gathering............. page 24

These initiatives help provide the local data upon which rational land use plans, regulations and decisions can be based.

Beyond Local Impacts ............................................. page 28

NEMO programs focus on local impacts. However, as an innovator, NEMO programs often create or inspire changes to state or regional plans, policies and programs.
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• The Project: What, Why, & How
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• StoryMap Tour
Step 1: Web Research

Scoured town websites for:

- POCDs
- Zoning regulations
- Subdivision regulations
- Inland/wetlands regulations
- Stormwater plans
- other
“We”

Manon Lefevre

Kerrin Kinnear
Selecting Towns

- not randomized
- Started with towns we knew, then:
  - urban/suburban/rural
  - median home price
  - geographic distribution between 9 COG regions
Strategies for incorporating LID

Technical manual

Checklist

Reg by reg
Are we talking about the same thing?

- LID
- Green infrastructure
- Green stormwater infrastructure

- Often used interchangeably
- Federal & state agencies using green infrastructure
- LID used at local level – so we used LID
How to Quantify?

### Recommended Site Planning & Development Practices

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<tr>
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<td>Practice #2: Cul-de-Sacs</td>
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<td></td>
<td>Practice #3: Road Drainage</td>
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<td></td>
<td>Practice #4: Parking Ratios/ Parking Lot Size</td>
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- Practice
- Rationale
- Recommendation(s)
- Things to consider
- Case studies
1. Does your community encourage/require the use of low impact development or green infrastructure to manage stormwater? If so, in what ways?

2. What are the most important factors driving your community to encourage or not encourage LID?

3. What are the biggest obstacles to implementing LID regulations or practices in your town?
Who’d we talk to?

Interviewed 78 people in 74 of 85 towns reviewed
Who’d we talk to?

78 interviews over 2 months
• The Project: What, Why, & How
• Results
• StoryMap Tour
Step 1 Results – Reg. Review
General Support for LID

54 of 85 towns mention LID in regs
General Support for LID

65 of 85 towns mention reducing impervious surfaces
Specific Regulations

LID Practices by Number of Towns Adopted

Breakdown of LID Policies

Number of Towns Containing Policy

LID Policy

Conservation/Open Space Subdivision
Tree Conservation
Riparian Buffers
Stormwater Management Plan
Parking Sizing
Sidewalks
Clearing and Grading
Parking Runoff
Road Drainage
Driveways
Street Width
Cul-de-Sacs
Setbacks and Frontages
Roof Runoff
Policies Adopted by Town

Number of LID Policies Adopted

- 1-4 Policies
- 5-8 Policies
- 9-12 Policies
- 13-16 Policies
- Not Included in Study
Does size matter?

Number of LID Policies by Population

<table>
<thead>
<tr>
<th>Number of Towns</th>
<th>1-4 Policies</th>
<th>5-8 Policies</th>
<th>9-12 Policies</th>
<th>13-16 Policies</th>
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</thead>
<tbody>
<tr>
<td>78,001 - 140,000</td>
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<td>14,001 - 35,000</td>
<td>2</td>
<td>14</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>0-14,000</td>
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<td>5</td>
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Does wealth matter?

![Number of LID Policies by Median Home Price](chart-image)

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</tr>
</thead>
<tbody>
<tr>
<td>$756,000 - $1,325,000</td>
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<td>0</td>
<td>1</td>
</tr>
<tr>
<td>$410,001 - $756,000</td>
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<td>4</td>
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</tr>
<tr>
<td>$225,001 - $410,000</td>
<td>2</td>
<td>13</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>$101,000 - 225,000</td>
<td>9</td>
<td>13</td>
<td>17</td>
<td>8</td>
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</table>
Step 2 Results - Interviews
Top 5 LID Drivers

- Staff Champions: 37
- Environmental Motives: 31
- Commission Champions: 29
- Stormwater Concerns: 18
- Community Character: 17

Number of Respondents
All LID Drivers

Number of Responses

Staff Champions: 37
Commission Champions: 29
Environmental Motives: 31
Stormwater Concerns: 18
Community Culture: 17
Private Sector: 13
Education/Outside Organizations: 13
Reduced Cost: 9
Other: 12

Motives for Implementing LID
Top 5 LID Barriers

- Cost: 28
- Lack of Educational Opportunities: 27
- Maintenance Concerns: 18
- Town Staff: 16
- Lack of Resources: 14
LID Barriers

**Cost**: to developers/applicants, to town, to residents

**Lack of ed**: commissioners, community/homeowners, contractors, developers, nurseries, private engineers, town engineers, planners, staff

**Maintenance**: difficult to keep track of LID, maintenance concerns
LID Barriers

**Town staff**: lack of coordination between planning and public works, planner, public safety (fire department, etc.), public works, town engineer

**Lack of resources**: lack of funding/resources, no in-house engineer, time constrains (Staff/Volunteers)
All LID Barriers

Number of Responses

- Perceived Higher Cost
- Lack of Educational Opportunities
- Maintenance Concerns
- Other
- Town Staff
- Lack of Resources
- Site Constraints
- Poorly Written Regulations
- Low-Priority Issue
- Developer Pushback
- Public Pushback
- Engineering Community

The chart shows the number of responses for each barrier category.
• The Project: What, Why, & How
• Results
• StoryMap Tour
State of LID StoryMap

http://s.uconn.edu/stateoflid
GSI Showcase Tour

Jonathan Husky standing guard over porous concrete paver snow shelf along Hillside Drive